PROSPECTIVE PAYMENT
ASSESSMENT COMMISSION

MEDICARE AND THE AMERICAN HEALTH CARE SYSTEM

REPORT TO THE CONGRESS

JUNE 1997

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PROSPECTIVE PAYMENT ASSESSMENT COMMISSION

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June 1, 1997

The Honorable Albert Gore, Jr.
President of the Senate
United States Senate
Washington, D.C. 20510

Dear Mr. President:

I am hereby transmitting to the Congress the report *Medicare and the American Health Care System.* This report has been prepared by the Prospective Payment Assessment Commission as required by Section 1886(e)(2)(C) of the Social Security Act.

Sincerely,

Joseph P. Newhouse, Ph.D.
Chairman

Enclosure

Prospective Payment Assessment Commission

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June 1, 1997

The Honorable Newt Gingrich
Speaker of the House
United States House of Representatives
Washington, D.C. 20515

Dear Mr. Speaker:

I am hereby transmitting to the Congress the report *Medicare and the American Health Care System.* This report has been prepared by the Prospective Payment Assessment Commission as required by Section 1886(e)(2)(C) of the Social Security Act.

Sincerely,

Joseph P. Newhouse, Ph.D.
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Executive Summary

Executive Summary

The American health care system is undergoing changes that would have been hard to imagine a few years ago. Developments in health care delivery and financing have altered the way services are furnished, where they are offered, and how they are paid for. New relationships have formed between payers and providers and among providers themselves. And the growth in national health care spending has fallen to its lowest level in more than three decades. Much of the recent impetus for this transformation is attributed to managed care, but it also reflects advances in medical science, new approaches to the organization and coordination of care, and policy initiatives from both private and public payers.

The 25 years following implementation of Medicare and Medicaid in 1966 saw rapid increases in utilization, prices, and spending throughout the health care sector. Attempts to constrain expenditures in the 1970s generally were unsuccessful. In the 1980s, the Federal government intensified efforts to control its outlays, by establishing a prospective payment system (PPS) in 1983 that set Medicare payments for hospital inpatient operating costs. Although PPS slowed the growth of Medicare's outlays for hospital services, hospitals' costs continued to rise. Moreover, Medicare payments for other services increased rapidly. To stem program outlays, Medicare in the early 1990s adopted a fee schedule for physician services and included hospital inpatient capital costs in PPS. Nevertheless, program spending continues to climb, threatening the solvency of the Medicare Hospital Insurance (HI) trust fund and substantially exacerbating the Federal budget deficits projected into the next century.

Private insurance was the model for Medicare's initial cost-based reimbursement methods. In the 1980s and early 1990s, as Medicare moved away from cost reimbursement to fixed payment rates for hospital and physician services, private payers fueled continued cost increases by providing revenue surpluses sufficient to cover those costs. More recently, however, insurers have actively pursued strategies to control their health care outlays, often by adopting managed care techniques.

These techniques limit the quantity and mix of services delivered. Providers must keep their prices competitive in order to attract patients. In addition, many insurers require them to bear some of the financial consequences of their treatment decisions. These developments, in turn, are affecting the relationships among providers, as they try to maintain their financial performance and position themselves in the evolving marketplace. All of these changes are having a major effect on the way services are furnished and on the overall cost of health care.

Although the influence of managed care is more pronounced in the private sector, it is an important and growing force in both the Medicare and Medicaid programs. Thus, the private sector once again is serving as a model for public programs. This has raised concerns about how mechanisms that have evolved in one environment may appropriately be applied in a very different one. The issues that have generated discussion among policy makers include developing an appropriate payment method for managed care plans, adjusting plan payments for the different levels of service use expected among various groups of beneficiaries, monitoring the quality of care, and incorporating populations with special needs. These issues are difficult because public programs present unique situations for managed care; moreover, they have not yet been resolved in the private sector either.

In this report, the Prospective Payment Assessment Commission (ProPAC) examines recent trends in health care spending, as well as changes in financing and delivery and their effects on health care providers, Medicare beneficiaries, and other groups. Chapter 1 presents the growth in national health care expenditures, compares the experience of private payers and the Medicare program in controlling per capita spending, and analyzes the relationships among major sources of hospital payments. It also discusses the changing financing environment. Chapter 2 addresses recent developments in Medicare's risk contracting program. It explains risk plan payments, describes patterns of plan and beneficiary participation, and reviews issues related to quality of care for beneficiaries enrolled in managed care plans.

Chapter 3 focuses on hospitals, detailing their costs, revenues, and resulting margins. It also highlights how hospitals are adapting to their changing role in the continuum of care while facing an environment of increased financial pressure. Particular attention is paid to the maintenance of certain special missions that some hospitals historically have undertaken. In Chapter 4, ProPAC compares Medicare policies across post-acute care providers. The chapter also looks at the trends in service use and spending, and discusses the components of growth for each type of organization. Information on the distribution of patients and treatment patterns across post-acute care providers is also presented.

HEALTH CARE SPENDING TRENDS

In 1994 and 1995, national health care expenditures increased at the slowest rates since before 1960. Spending grew by 5.1 percent and 5.5 percent, respectively, in those two years, rising to $988 billion. Real per capita health expenditures, which take into account general inflation and population growth, went up by only 1.4 percent in 1995, compared with a 4.8 percent annual rate through the 1980s. Although there were several dips in this trend during the 1980s and early 1990s, the most recent deceleration began in 1993.

Health care spending as a percentage of the nation's gross domestic product (GDP) indicates the proportion of the nation's economic resources used to provide health services. This share jumped from 8.9 percent in 1980 to 13.6 percent in 1993, but has held steady since then. The more recent trend has, in the past four years, lowered the Congressional Budget Office's estimates of national health expenditures in 2003 from 20 percent of GDP to 15 percent.

Hospital services account for the largest portion of health expenditures, $350 billion in 1995. This amount includes spending on services provided in inpatient and outpatient acute care facilities, as well as in hospital-based post-acute care facilities. The share of total spending accounted for by hospital services, however, fell from 41.5 percent to 35.5 percent between 1980 and 1995. Moreover, the mix of services provided in the hospital has changed: Only 70 percent of spending on community hospital services was for inpatient care in 1995, compared with 87 percent in 1980.

The composition of spending among other health care providers has changed as well. Physician services accounted for 20.4 percent of total expenditures in 1995, up from 18.3 percent in 1980. Compared with expenditures for hospital and physician services, spending on free-standing nursing facilities and home health agencies still is growing rapidly. Consequently, these services account for ever-rising shares of total health care expenditures, reaching a combined 10.8 percent in 1995, compared with 8.1 percent in 1980.

THE PATTERN OF HEALTH CARE FINANCING

A growing proportion of health care spending comes from public sources. Despite reforms in hospital and physician payment policies during the 1980s and early 1990s, Medicare's average rate of spending growth has remained high. The program's expenditures increased by 11.6 percent annually through the 1980s, and then by 10.8 percent per year through the first half of the 1990s, reaching $187 billion in 1995. Medicare's share of total health care expenditures, which rose only slightly from 15.2 percent in 1980 to 16.1 percent in 1990, jumped to 18.9 percent in 1995, as private payers were more successful in constraining their spending.

Medicare Hospital Insurance, which covers inpatient hospital, skilled nursing, home health, and hospice care, is funded primarily by a dedicated payroll tax. As a result of the continued growth of Medicare spending, the net assets of the HI trust fund that pays for those services are being depleted. In 1995, expenditures from the trust fund exceeded income for the first time; under current policies, the trust fund is projected to become insolvent by 2001.

Medicaid is the other major public health care program. Medicaid expenditures rose 8.4 percent in 1995, to $141 billion. This represents a substantial deceleration compared with earlier years, which saw expansions in program eligibility as well as a huge (and largely unintended) influx of Federal funds for hospitals that treat a disproportionate share of poor patients. Medicaid's share of total health care spending grew from 10.6 percent in 1980 to 14.3 percent in 1995. Although poor children and their families account for two-thirds of

Medicaid enrollment, more than 70 percent of Medicaid spending is for services provided to the program's aged and disabled population.

In the private sector, insurers' spending on health care rose by only 2.6 percent in 1995, to $311 billion. This contrasts with an annual rate of 12.8 percent throughout the 1980s. As a result, although the proportion of total spending accounted for by private insurers grew from 28.2 percent in 1980 to 33.3 percent in 1990, it dropped to 31.4 percent by 1995.

Health spending financed by individuals' out-of-pocket payments rose 3.7 percent in 1995, to $183 billion. That compares with a rate of 9.4 percent throughout the 1980s. As a share of total expenditures, this component has fallen slowly but steadily, from 24.4 percent in 1980 to 18.5 percent in 1995. This trend may be attributable to the growth of managed care, which is characterized by low deductibles and copayments.

MEDICARE AND OTHER PAYERS

In the early 1980s, Medicare's real increases in per capita spending exceeded those of private insurers by about 2 percentage points per year. This pattern reversed in 1984, after the implementation of PPS. Medicare's real per capita expenditure growth fell, and it continued to be about 2 percentage points below the trend among private insurers over the next six years. However, spending escalated for both groups in the latter part of the decade.

The pattern has reversed once again in the 1990s. Private insurers have dramatically reduced their spending growth, while Medicare's annual increases have not gone down. The divergence in these trends is most evident in 1994 and 1995, when private insurers' per capita spending actually fell relative to general inflation, while Medicare's edged upward. This difference holds for both hospital and physician spending. It is especially pronounced in the nursing facility and home health agency categories, where Medicare's benefits and the covered population differ substantially from those of private insurers.

The developments in the hospital sector over the past two decades illustrate the interdependence of Medicare's and other payers' payment policies. In the early 1980s, Medicare and Medicaid reimbursed hospitals' reasonable costs of treating their patients, while private payers paid somewhat more than costs. These surplus revenues from private payers were more than sufficient to offset losses from providing uncompensated care.

With the introduction of PPS for Medicare and the loosening of Federal restrictions on the Medicaid payment methods used by the states, hospitals' ability to cover costs with payments from the two major public programs became more uncertain. In the early years of PPS, however, Medicare payments actually rose relative to costs, while the ratio of Medicaid payments to costs dropped only slightly. In the late 1980s, neither Medicare nor Medicaid payments kept up with rapidly rising costs. While this put hospitals under pressure to generate additional revenue or reduce cost growth, they were able to obtain higher payments from private payers. Between 1986 and 1991, private payments rose from 116 percent of costs to 130 percent.

Since the early 1990s, however, private payers have resisted further increases in their payments. Unable to generate additional surpluses from private payers—and facing continued pressure from Medicare and Medicaid—hospitals have controlled their costs. By 1995, private payments were down to 124 percent of costs, and the aggregate payment surplus from private payers had fallen by about one-quarter. But lower cost growth reduced hospitals' losses from patients covered by public programs. Consequently, despite a slight increase in the losses from uncompensated care, the private payer surplus was still sufficient to cover them.

HEALTH INSURANCE

A key contributor to the recent declines in spending growth, particularly in the private sector, is managed care. Managed care plans use a variety of methods to control their outlays: selective contracting with providers, negotiation for price discounts, payment methods that shift some risk to providers, and utilization controls. The array of managed care products has increased greatly, as has the difficulty of differentiating among them. Enrollment in managed care plans has skyrocketed.

By 1996, 75 percent of insured employees in firms with at least 200 workers were enrolled in

managed care plans, up from 56 percent in 1992. Enrollment in health maintenance organizations (HMOs), the traditional managed care model, increased by 50 percent during this period, while the proportion of employees in point-of-service plans, which more routinely cover the use of out-of-network providers, doubled. For the first time in 1996, enrollment in HMOs exceeded that in indemnity plans, and even indemnity insurers had adopted some managed care techniques such as precertification of hospital admissions.

The proportion of the nonelderly population with employer-based health insurance coverage dropped between 1988 and 1995, from 73 percent to 67 percent. This was offset partially by an increase in Medicaid recipients, from 9 percent to 13 percent of the population under 65. In addition, the number of non-aged people covered by Medicare through Social Security Disability Insurance rose slightly. The increased availability of Medicaid and Medicare, however, was not enough to prevent a rise in the uninsured population, from 32 million to 40 million people. Between 1988 and 1993, the share of the nonelderly population without insurance at a given point in time grew from 15 percent to 17 percent. The proportion who are uninsured edged up only slightly, however, from 1993 through 1995.

MEDICARE MANAGED CARE

In contrast to the non-Medicare population, the vast majority of Medicare's beneficiaries are in its fee-for-service program. This is due to several factors. One is that fewer managed care plans are available to Medicare beneficiaries than to employed groups. In many areas, Medicare beneficiaries have no managed care options. Additionally, because of their higher risk of illness or their desire to maintain established relationships with physicians or other providers, they may be reluctant to join managed care plans. However, a major reason managed care is not as widespread in Medicare as it is in the private sector is that beneficiaries can choose not to enroll. Employers, by contrast, often offer no indemnity alternatives.

Nevertheless, as of April 1997 more than 5 million Medicare beneficiaries were enrolled in managed care, a figure that has risen by more than 25 percent in each of the past two years. About 90 percent of Medicare managed care enrollees are in risk plans. These plans are paid a fixed monthly amount for each enrollee and bear full financial responsibility for providing the benefits in their Medicare contracts. The payment rate is based on fee-for-service program spending for beneficiaries in the enrollee's county of residence.

This method for determining risk plan payments has been criticized on a number of counts. Chief among these concerns is the lack of an adequate risk adjustment mechanism. Medicare adjusts its payment rates to reflect the enrollee's age, sex, Medicaid and institutionalized status, and the availability of employer-based insurance coverage. Although these characteristics are associated with variation in program spending, they do not capture adequately the differences in health status between the fee-for-service and risk populations. Several studies have found that Medicare pays risk plans more than their enrollees would have been expected to cost in the fee-for-service program, with estimates of excess payment ranging between 5 percent and 7 percent.

Basing risk plan payment rates on fee-for-service spending also results in substantial variation across geographic areas, even when differences in local input prices are considered. Payment rates often vary substantially among counties in the same metropolitan area. Moreover, this variation may be greater than would be explained by differences in the market conditions faced by risk plans. In addition, as fee-for-service spending continues to grow, risk plan payments will rise also, which hinders the program from achieving potential savings from managed care.

Between 1994 and 1997, the number of risk contracts more than doubled. This growth has expanded the availability of Medicare managed care in many markets, including a number of areas that did not have a contract previously. One consideration related to reducing the variation in risk plan payment rates is that lower rates might discourage plan participation in the program, since plans tend to be located in areas with higher payment rates.

However, there are signs that plan participation is affected by factors other than, or at least in addition to, the payment rate. Areas first served by a risk plan during the 13 months prior to January 1997 had payment rates below the national average.

Moreover, a comparison of rural counties with and without Medicare risk plans shows that they have almost identical Medicare payment rates, when differences in local input prices are adjusted for. The rural counties with risk plans tend to be located near an urban area, contain more providers and potential enrollees, and have higher per capita incomes.

A potential reason for the rapid growth of Medicare managed care is the extra benefits available to risk plan enrollees. If the average Medicare payment rate (plus projected fee-for-service deductibles and copayments) for a plan's service area exceeds its projected costs of providing the standard Medicare benefit package, there are savings. Medicare requires the plan to return such savings to the program, credit the amount to future years, or offer enrollees additional benefits with the same actuarial value.

Most plans meet this obligation by providing non-Medicare-covered services, permitting the use of out-of-network providers, or lowering cost sharing. To attract more enrollees, plans also may offer additional benefits exceeding the savings amount. Plans are permitted to charge a monthly premium for these services or to require enrollee cost sharing, up to the value of the benefits. Most plans, however, choose to waive a portion of the allowed premium. Consequently, risk plan enrollees often receive benefits beyond the standard Medicare package, for which they are not required to pay in full.

The value of these benefits can be substantial. In 1996, risk plans offered, on average, $79 in extra benefits per member per month. This amount, however, varied widely across plans. Beneficiaries were more likely to be enrolled in risk plans that offered more generous benefits. Consequently, extra benefits per risk enrollee were higher, $96 per month, on average.

The level of extra benefits is related strongly to the payment rates plans receive. Moreover, as these payment rates have increased, extra benefits have risen more than proportionally. Among plans operating in 1994, the average extra benefit amount per member per month almost doubled, from $43 to $83, in the succeeding two years.

The expansion of Medicare managed care raises a number of other policy issues. There is concern over monitoring plan performance, structuring the program so that beneficiaries can make appropriate choices, and holding plans accountable for quality of service and care. Medicare is devoting substantial resources to providing beneficiaries with comparative information. It still is unclear, however, what information will best help beneficiaries decide between the fee-for-service and managed care programs, and among managed care plans.

A related set of issues centers on whether the risk program is a good choice for beneficiaries with chronic health problems and impairments. An adequate risk adjustment mechanism is particularly important for this population. Several demonstrations are being developed or conducted to examine whether a managed care arrangement is suited to serving these beneficiaries, and whether it can improve the coordination of services for enrollees with special needs.

HOSPITAL PAYMENTS AND COSTS

The hospital industry is undergoing a historic transformation in structure and function, as hospitals continue to respond to their changing environment. The demand for health care has shifted away from acute inpatient services and toward greater use of ambulatory and post-acute settings, changing the role of hospitals and putting pressure on them to compete for patients from increasingly price-conscious payers.

Hospitals have reduced their inpatient capacity and expanded into related lines of business like outpatient and post-acute care. They also have entered into a variety of contractual relationships with each other and with other types of providers to improve efficiency and enhance their market positions. Their cost-reduction efforts have been successful, and that success has been rewarded by improved financial performance across hospitals in every category. However, the ongoing changes they face also potentially threaten the ability of some hospitals to carry out such traditional missions as teaching, research, and caring for the poor.

Since Medicare is responsible for almost 40 percent of all hospital payments, its policies significantly affect the financial status of hospitals and their ability to respond to their changing environment. In fiscal year 1997, $125 billion will be paid to hospitals by the Medicare program. About $71

billion in operating payments and another $8 billion in capital payments will be made through Medicare's PPS. PPS payments are distributed across hospitals based on factors that reflect differences in the costs they face, but there are also provisions that provide extra payments to some groups of hospitals because of their special roles.

A central objective of PPS is to create incentives for improved hospital efficiency and cost containment. In the first year of PPS (1984), hospitals held their cost growth well below the historical trend, but Medicare payments per case rose sharply. The result was an aggregate PPS inpatient margin of 13.4 percent. In the following six years, cost growth resumed its rapid pace, while Medicare payments were constrained; by 1990, costs were higher than payments, resulting in a negative PPS margin. In 1991 and 1992, with Medicare costs exceeding payments and pressure from private payers intensifying, costs began to grow more slowly, and the PPS margin began to level off and then increase. In 1993, Medicare operating costs per case went up by only 1.2 percent, the smallest rise in the history of the program. As a result, the PPS margin became positive again for the first time in four years.

Medicare operating costs per case declined in 1994 and 1995. Although the increase in PPS payments per case in those two years was as low as it had ever been, the PPS margin rose from 1.0 percent in 1993 to 9.0 percent in 1995—its highest level in a decade. ProPAC estimates that, if current payment and cost trends hold, the PPS inpatient margin will reach 12.7 percent in 1997.

PPS margins in 1995 varied greatly both across hospital groups and for individual hospitals within those groups. Urban hospitals had higher margins than rural hospitals, a difference that has been widening due to lower cost growth for the urban group. Major teaching hospitals had much higher margins than other teaching hospitals and non-teaching facilities, a gap that also has been growing. After several years of falling PPS margins due to rapidly rising costs per case, proprietary hospitals tightened their control of costs, and their PPS margin increased sharply.

In almost every group, some hospitals had extremely high or low PPS margins. However, as margins have risen sharply in the past few years, the disparity between hospitals that are doing well under PPS and those that are not has been relatively constant; that is, the effects of slower cost growth have been seen across virtually all hospitals. The proportion of hospitals with negative PPS margins in 1995 was 36 percent, the lowest since 1986.

Compared with the PPS margin, the overall financial status of hospitals has been fairly stable. The aggregate total hospital margin was higher in 1995, however, than at any time in the preceding decade. Furthermore, the gap between the hospitals with the highest and lowest total margins had narrowed since the mid-1980s. In 1995, 20 percent of all hospitals had negative total margins, a smaller percentage than at any time since PPS began.

As with PPS margins, total margins vary greatly across hospital groups and for individual hospitals within any group. Both the level and distribution of total margins, however, are quite different from PPS margins. Rural hospitals, which had a lower aggregate PPS margin than urban hospitals in 1995, had a higher total margin. Hospitals with the greatest level of teaching intensity, which had by far the highest PPS margin, had an aggregate total margin among the lowest for any hospital group. Similarly, disproportionate share hospitals in large urban areas, which treat a high percentage of Medicaid and poor Medicare patients, had a high PPS margin and a low total margin.

These discrepancies between PPS and total margins indicate differences among hospitals in their vulnerability to sustained financial pressure in the future. Hospitals that experience large losses on their uncompensated care and Medicaid and Medicare patients may not be able to raise sufficient revenues from private payers to make up for these losses. These hospitals may have too small a share of private-pay patients or too little leverage with private insurers to be successful.

With increasing pressure from the private sector, the need and ability to balance these losses and gains may be even more unequal across hospitals in the future. The pressure may be particularly intense in areas with high managed care penetration and for hospitals with high patient care costs. To the extent that their costs are elevated due to inefficiency,

hospitals with above-average costs will be forced to become more efficient.

However, these changes also may affect the services that hospitals in some areas can provide, inhibiting access to care for some populations and the ability to undertake other special missions. Because these special missions tend to be concentrated among a small set of hospitals, those facilities—and the populations they serve—may be particularly vulnerable in the more competitive marketplace.

POST-ACUTE CARE PROVIDERS

The changes occuring among hospitals have focused increased attention on post-acute care, which includes services furnished in skilled nursing facilities (SNFs), home health agencies, rehabilitation hospitals and units, and long-term care hospitals. Medicare spending for these services has soared over the past decade because more beneficiaries are receiving such care and more services are provided to each user. Rising use reflects changes in both the nature and providers of post-acute care. Many services previously provided during an acute hospitalization now are furnished in other facilities and in patients' homes. The distinction between acute and post-acute care thus is blurring. The delineation between post-acute and long-term care similarly is becoming less clear, since many post-acute care providers meet patients' chronic health care needs as well.

The supply of traditional post-acute care providers and the number and variety of alternative providers that specialize in furnishing rehabilitative therapies on an outpatient basis have grown substantially in recent years. The differences among these providers are diminishing, however, as the services they offer become more similar. This trend has created opportunities to shift the delivery of services across sites and substitute care among providers.

Medicare continues to employ cost-based reimbursement and fee-for-service payment methods, which create few financial incentives to furnish services efficiently and encourage overutilization. Moreover, since payment approaches vary by type of provider, Medicare may pay substantially different amounts for comparable services furnished to similar patients in alternative settings. Further, with each provider receiving separate payments, there are few incentives to manage patients' total needs and coordinate care across sites. Consequently, spending may be higher than necessary.

Medicare SNF payments jumped from $98 per day in 1990 to $292 per day in 1996. SNF payments for routine costs (room, board, and nursing services) are subject to national average per diem limits; however, payments for ancillary services (therapies, diagnostic services, and supplies) and capital expenses are not. Therefore, the increase in total payments must primarily reflect growth in the use of ancillary services (which now account for almost half of all SNF costs).

The costs of SNF care vary by type of facility. Costs in free-standing SNFs (standardized for differences in local input prices) averaged $235 per day in 1994, compared with $443 for hospital-based facilities. Differences in patient acuity, treatment protocols, and cost-allocation practices may account for some of that discrepancy. Alternatively, the higher costs of hospital-based SNFs may be an artifact of the faster growth in the number of these facilities, since new SNFs are exempt from cost limits for up to their first four years of operation and thus have no incentive to hold down their start-up costs.

Medicare payments for home health care are based on agency-specific costs per visit up to an aggregate cap that depends on the mix of visits provided. Home health expenditures nonetheless have mushroomed, fueled by greater numbers of enrollees receiving services and by more visits provided to each patient. Rising use, in turn, is related to poorly defined benefit guidelines and unlimited coverage. The bulk of home health visits are furnished to a relatively small group of chronic users who receive services over extended periods.

Medicare payments for inpatient operating expenses in rehabilitation hospitals and units and long-term care hospitals are based on the relationship between each facility's current costs and its payment ceiling, which is the product of its own per case target amount and the number of cases. Because each facility's ceiling is determined by its own base-year costs updated to the current year, a new provider has the opportunity to inflate its initial operating costs and thus establish a high payment ceiling. Accordingly, new facilities have a distinct financial advantage relative to older

ones. That disparity has spurred tremendous growth in the number of new providers, especially long-term care hospitals. The availability of more facilities, along with changing medical practice, has led to unprecedented increases in beneficiaries' use of these facilities and in Medicare expenditures for the services they provide.

Replacing the current patchwork of cost-based reimbursement methods with individual prospective payment systems would help to curb Medicare's spending on post-acute care in the short run by addressing some of the contributing factors. Controlling expenditures in individual settings, however, creates incentives to shift care to other sites. Over the long run, then, patients still may receive care in multiple settings during a spell of illness. Making payment methods and amounts consistent across providers could help to mitigate this response. Without volume controls that encompass all services delivered across all sites, though, Medicare expenditures could continue to rise unchecked.

The implementation of either consistent prospective payment systems or payments for broader units of service depends on an adequate case-mix measurement system that can be used for multiple providers. Such adjusters are not yet available, however. Appropriate resource use is hard to determine because patterns of care vary widely across providers. Understanding these differences is critical to develop and implement policies that will effectively control Medicare spending for post-acute care.

CONCLUSIONS

Private payers' efforts to control their health care outlays have resulted in changes in health care financing and delivery that are likely to continue for some time. The rapid growth of managed care, coupled with continuing improvements in medical science and technology, has led to major shifts in the quantity and types of services delivered, where they are furnished, and how they are paid for.

New relationships have developed between and among hospitals, physicians, and other components of the health care delivery system. The flow of funds from payers to providers reflects the implementation of payment methods that were not widely used until recently. These changes have fostered a closer alignment between the roles and objectives of those who furnish health care and those who pay for it. As a result, increases in the costs incurred by health care providers and third-party payers have diverged from long-established trends.

The recent changes in the health care system have had a greater effect on private sector expenditures than on the Medicare program. Part of this disparity may be because Medicare covers a different patient population and incorporates additional payments to support special missions, such as teaching and serving the poor. But a key factor in the private sector's success in curbing expenditures is the use of managed care techniques, which control the volume of services provided. By contrast, the bulk of Medicare spending is in the fee-for-service sector, which continues to reward many providers for furnishing more services. This is especially true for Medicare's reimbursement of post-acute care providers, which has spiraled upward due to cost-based reimbursement incentives and lack of volume controls.

Medicare is at an important crossroads. The impending insolvency of the Hospital Insurance trust fund emphasizes the need for change. Information on the changes that are occurring within the health care system may provide insight for Medicare as it seeks to constrain spending. For example, the movement of services out of the inpatient setting, combined with hospitals' changing cost structures, requires ongoing policy adjustments. The provision of more services in post-acute care settings underscores the need to revamp the payment structures for those providers. And Medicare must reform its risk contracting policies to achieve the cost-saving advantages of managed care programs.

The challenges facing the American health care system, however, go beyond controlling expenditures. Efforts to deliver care more efficiently must not reduce access to appropriate services or compromise quality of care. The broader social goals of the health care system also must be protected. These include ensuring care for the uninsured, supporting teaching and research, and financing essential but extremely costly services. Ultimately, these problems will have to be addressed by public and private payers, along with the provider community, as the nation shapes its health care system for the future.

Chapter 1

Issues in Health Care Financing and Spending

Chapter 1

Issues in Health Care Financing and Spending

The growth in national health care expenditures has slowed markedly in recent years. In fact, the spending increases in both 1994 and 1995 were the smallest in more than three decades. This trend has led the Congressional Budget Office (CBO) to project national expenditures for 2003 at a level nearly half a trillion dollars less than it had estimated just three years ago.

The primary impetus for reduced spending growth has been private and public employers becoming more aggressive in demanding lower increases in their health plan premiums. That has fostered greater competition among insurers, prompting them to adopt a wide variety of cost-control strategies, including managed care techniques that constrain both the price and use of services. Managed care has also expanded rapidly in the Medicare and Medicaid programs, although not reaching the level of penetration found in the private sector.

These trends are changing the way health services are furnished. Insurers are becoming more involved in the types and volume of services delivered, and providers increasingly are bearing some of the financial consequences of their treatment decisions. This, in turn, is altering the relationships among providers, as they try to improve their financial performance and position themselves in the market.

These changes have resulted in unprecedented financial pressure on the hospital industry. Faced with greater competition and insurers' demands for lower prices, hospitals have responded by reining in their costs and changing both the services they offer and their relationships with other providers. Many facilities are diversifying into post-acute care, forming joint arrangements with physician groups, and developing provider-sponsored health plans. There has also been widespread consolidation and merger activity, which may help the industry counter managed care pressure by creating stronger bargaining positions in negotiations with health plans. Providers that traditionally have cared for patients following a hospital stay are also expanding their markets by offering a broader range of services. These post-acute care providers are now competing with hospitals and with each other for patients and garnering a larger share of the health care dollar.

While overall health spending growth has moderated considerably, most of the recent progress in controlling costs has been achieved in the private sector. The growth in Medicare's outlays has changed little since the 1980s. The Medicare program has benefited much less than private insurers from the dramatic slowdown in hospital spending, and its policies have fostered continued double-digit increases in post-acute care spending.

In this report, the Prospective Payment Assessment Commission (ProPAC) examines recent trends in health care spending, as well as changes in financing and delivery and how they are affecting health care providers and consumers. Chapter 1 presents the trend in national health care expenditures and compares the experience of private payers and the Medicare program. It also discusses the changing financing environment, including the expansion of managed care in both the public and private sectors and changes in insurance coverage. Chapter 2 addresses recent developments in Medicare's risk contracting program. It explains risk plan payments, describes patterns of plan and beneficiary participation, and reviews issues related to quality of care for beneficiaries in managed care plans.

Chapter 3 focuses on hospitals, which account for the largest share of health care spending, detailing their costs, revenues, and resulting margins. It also explores the ways in which hospitals are

adapting to changes in their role in the continuum of care while facing an environment of increased financial risk. Finally, in Chapter 4, ProPAC presents a comparison of Medicare policies, spending, and service use across post-acute care providers. Information on the distribution of patients and treatment patterns is also presented.

NATIONAL HEALTH SPENDING TRENDS

Monitoring the resources devoted to health care is critical to evaluating the nation's progress in providing services to the population in a cost-effective manner. National health expenditures include all spending for personal health care goods and services, administration of public programs and private insurance, as well as research, construction, and public health activities.[1] This section reviews trends in national health spending in the aggregate, by type of provider and by payment source. (More detailed data on the spending amounts for each year from 1980 through 1995 are presented in Appendix A.)

Aggregate Spending

In 1994 and 1995, the nation experienced the lowest increases in national health spending since before 1960. Although edging past the growth rate of 5.1 percent in 1994, total health spending rose only 5.5 percent in 1995, from $937 billion to $988 billion (see Table 1-1).

Table 1-1. Change in Total and Per Capita National Health Spending, 1980-1995 (In Percent)

	Total		Per Capita	
Year	Nominal	Real*	Nominal	Real*
Average annual change				
1980-1990	10.9%	5.9%	9.8%	4.8%
1990-1995	7.2	4.0	6.2	3.0
Annual change				
1991	9.2	4.8	8.0	3.6
1992	9.5	6.3	8.7	5.5
1993	6.9	3.8	5.7	2.7
1994	5.1	2.4	4.3	1.7
1995	5.5	2.6	4.3	1.4

* Adjusted by the consumer price index for all urban consumers (CPI-U-X1).

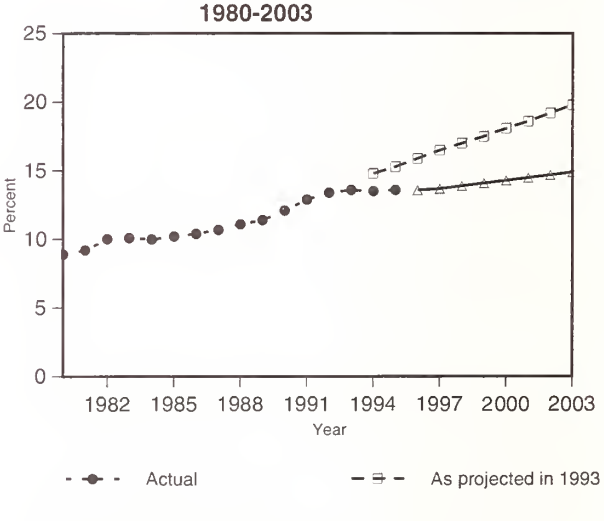
SOURCE: Health Care Financing Administration, Office of the Actuary. Population estimates from the Social Security Administration.

The reduction in spending growth in the 1990s represents a major departure from the trend of the prior three decades. Except for two brief slowdowns in the 1970s and mid-1980s, health spending rose steadily between 1960 and 1990. In the 1980s, for example, nominal spending increased an average of 10.9 percent annually, climbing from $247 billion to $697 billion.

The recent slowing of total health spending growth also has resulted in a stabilization of health spending as a percentage of gross domestic product (GDP). Since 1993, health expenditures have remained at about 13.6 percent of GDP. The potential effect of this curbed growth can be seen in a comparison of current and prior projections of national health spending and spending as a percentage of GDP.

CBO now projects that health expenditures will reach $1.56 trillion in 2003. Spending as a share of GDP is forecast to stay at 13.6 percent in 1996 and then grow slowly to about 15 percent of GDP (see Figure 1-1). By contrast, 1993 estimates, made following years of higher growth, projected health care outlays to reach $2.05 trillion in 2003—a

Figure 1-1. National Health Spending as a Percentage of Gross Domestic Product, Actual and Projected, 1980-2003



Note: Projections made by the Congressional Budget Office. The earlier estimates were based on national health expenditures as projected in October 1993 and gross domestic product as projected in August 1995.

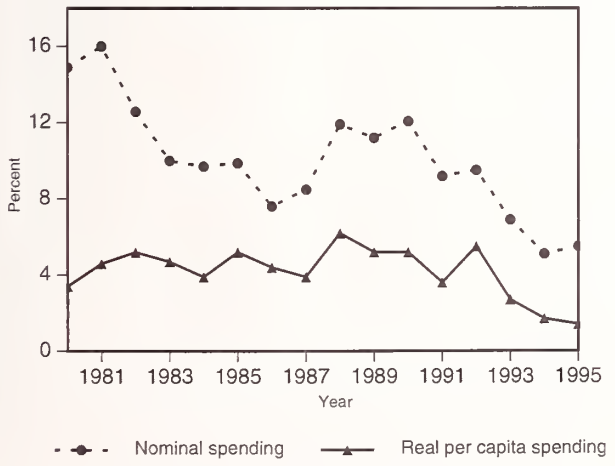
SOURCE: Health Care Financing Administration, Office of the Actuary, and the Congressional Budget Office.

difference of $490 billion. The earlier estimates projected health spending as a share of GDP to climb 3 percent annually through 2003, to almost 20 percent.

The recent moderation in nominal health spending also is reflected in the trend of real (inflation-adjusted) per capita health care spending. This measure tracks industry-based changes in service cost and use, and removes the effects of general inflation and population growth. In 1995, real per capita spending inched up only 1.4 percent, from $3,569 (expressed in 1995 dollars) to $3,621 (see Figure 1-2). By this measure, health spending has increased an average of 3.0 percent above general inflation and population growth in the 1990s, compared with 4.8 percent in the 1980s.

Historically, general inflation has accounted for about one-third to one-half of health spending growth. Nominal health spending is driven by general inflation as well as by health care industry-specific inflation, population growth, and changes in the volume and mix of services consumed. Real increases in per capita health spending are determined by many factors, though two commonly cited causes are scientific and technological advances and inflationary health financing methods. Advances in scientific knowledge, medical technologies, and clinical care expand the range of conditions considered treatable and increase the amount of medical intervention applied to patients. Much of this advancement results in improved patient outcomes, as well as substantially higher health care expenditures.

Figure 1-2. Change in National Health Spending, 1980-1995 (In Percent)



Note: Real per capita spending is adjusted by the consumer price index for all urban consumers (CPI-U-X1).

SOURCE: Health Care Financing Administration, Office of the Actuary. Population estimates from the Social Security Administration.

The traditional methods of paying for health services also have contributed to spending increases. Cost- and charge-based payments were the dominant means of provider reimbursement in the United States from the 1960s through the mid-1980s. These methods encourage both price inflation and increased service utilization. Since the 1980s, however, changes in government and private sector payment practices have substantially reduced this source of spending growth.

Medicare first shifted away from cost reimbursement with hospitals when it implemented its prospective payment system (PPS) in the mid-1980s. More recently, the program adopted the Medicare Fee Schedule and Volume Performance Standards to slow outlays for physician services. The fee schedule was phased in during the early 1990s to replace the customary, prevailing, and reasonable payment method with a fee system using a resource-based relative value scale. As described later in Chapter 1, the private sector has relied heavily on managed care techniques, which focus on utilization control and greater price competition. These cost-containment activities in particular led to the slowing of national health spending in the 1990s.

Spending by Sector

The recent moderation in aggregate health spending has been accompanied by an ongoing shift from acute inpatient care toward post-acute and ambulatory care. This change in service delivery is reflected in patterns of spending by type of provider as well.

Hospital Spending—Expenditures for hospital services, the largest single component of national health spending, increased 4.5 percent between 1994 and 1995, from $335 billion to $350 billion (see Table 1-2).[2] As with total nominal spending, the rise in hospital expenditures was higher in 1995 than in 1994, though lower than in all other years since before 1960. The spending increase in 1995 generally was due to growth in admissions, primarily among the elderly, rather than to greater service intensity or medical price inflation.

Table 1-2. Change in National Health Spending, by Sector, 1980-1995 (In Percent)

Sector	Average Annual Change		Annual Change				
	1980-1990	1990-1995	1991	1992	1993	1994	1995
Hospitals	9.6%	6.4%	10.1%	8.2%	5.9%	3.6%	4.5%
Community	10.0	7.0	10.8	9.1	6.3	4.0	5.0
Inpatient	8.6	5.1	8.4	7.0	5.1	1.9	2.9
Outpatient	16.7	12.6	18.3	15.3	9.9	9.5	10.2
Other							
Non-community[a]	7.7	-1.7	0.5	-1.6	-2.7	-2.1	-2.5
Federal[b]	7.1	5.4	10.4	4.8	6.6	2.7	2.6
Nursing facilities	11.2	8.9	12.2	9.0	7.6	8.1	7.5
Home health agencies	18.6	16.8	22.4	22.3	17.1	14.4	8.6
Physicians	12.5	6.6	8.8	10.4	4.0	4.4	5.8
Other[c]	11.3	7.4	7.1	9.8	9.2	5.6	5.6

[a] Includes patient care spending in non-community hospitals (long-term and psychiatric).

[b] Includes patient care spending in Federal hospitals (Departments of Defense and Veterans Affairs and Public Health Service).

[c] Includes personal care spending (dental services, other professional services, drugs and other medical non-durables, vision products and other medical durables) and research, construction, public health activities, administration of public programs, and net cost of private health insurance.

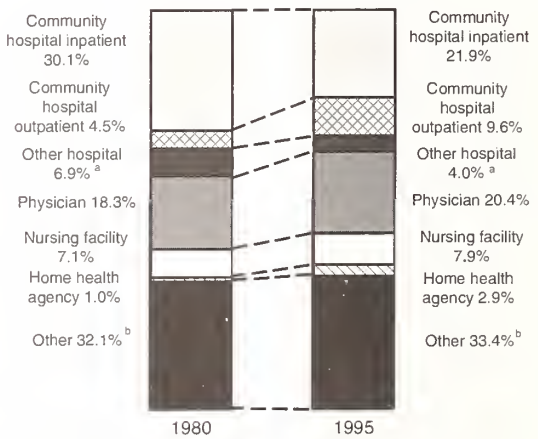
SOURCE: Health Care Financing Administration, Office of the Actuary.

Low rates of spending growth occurred in community hospitals as well as in non-community and Federal hospitals. Spending on community hospital services, which accounted for 89 percent of total hospital industry expenditures, rose 5.0 percent in 1995.[3] Much of this increase was driven by rising spending for outpatient services. Inpatient expenditures grew 2.9 percent, whereas outpatient spending climbed 10.2 percent. Outlays for care at Federal hospitals inched up 2.6 percent, while spending at non-Federal, non-community hospitals (namely long-term, psychiatric, and substance abuse facilities) decreased by 2.5 percent.

Although acute inpatient care still accounts for most hospital spending, its role continues to diminish. In 1995, for example, inpatient care represented 70 percent of spending on community hospital services, compared with 87 percent in 1980. This decline has been due to ongoing cost-containment efforts aimed at slowing inpatient spending, including shortening lengths of stay and substituting post-acute and outpatient care for many services previously provided during inpatient stays. By contrast, spending for outpatient services has increased steadily, from 13 percent of community hospital expenditures in 1980 to 30 percent in 1995. Inpatient services at community hospitals accounted for 22 percent of aggregate health care spending in 1995, down from 30 percent in 1980 (see Figure 1-3). During this time, spending for community hospital outpatient services rose from 5 percent to 10 percent of national spending.

Although the vast majority of hospital spending represents traditional inpatient and outpatient services, some post-acute services are provided by hospitals as well (and are included in hospital

Figure 1-3. Share of National Health Spending, by Sector, 1980 and 1995



Note: Shares may not sum to 100 percent due to rounding.

[a] Includes patient care spending in Federal hospitals (Departments of Defense and Veterans Affairs and Public Health Service) and in non-community hospitals (long-term and psychiatric).

[b] Includes personal care spending (dental services, other professional services, drugs and other medical non-durables, vision products and other medical durables) and research, construction, public health activities, administration of public programs, and net cost of private health insurance.

SOURCE: Health Care Financing Administration, Office of the Actuary.

spending data). These include nursing facility care, rehabilitation, and home health care. Among the advantages to hospitals of offering these services are the use of otherwise excess bed capacity, the ability to receive separate payment for post-acute care services, and more control of the flow of patients using hospital services.

Physician Spending—Expenditures for physician services, the second largest component of national health spending, rose 5.8 percent in 1995, from $191 billion to $202 billion. Although the rate of increase in 1995 was slightly higher than those in 1993 and 1994, these growth rates are substantially smaller than the double-digit annual increases experienced in the late 1980s and early 1990s. Physician expenditures climbed an average of 12.5 percent annually in the 1980s, from $45 billion to $146 billion.

The share of total health spending accounted for by physician services rose 15 percent in the 1980s; however, that share has remained the same, about one-fifth of total spending, since 1990. The deceleration of physician expenditures is due to the curbing of Medicare physician payments in the early 1990s, and particularly to extremely limited growth in private sector physician spending since 1993. Managed care plans stemmed these outlays in the private sector, by placing limits on inpatient and specialty service utilization and negotiating lower prices with providers. Also consistent with managed care practices, the share of office-based physician revenues from inpatient services fell from 23 percent to 21 percent between 1992 and 1994, while the share from outpatient and office services rose from 54 percent to 57 percent.[4]

Post-Acute Facility Spending—Spending on services furnished in free-standing nursing facilities increased 7.5 percent in 1995, from $72 billion to $78 billion. Unlike most other health sectors, free-standing nursing facilities have remained a fairly steady share (7 percent to 8 percent) of national health spending since 1980. Expenditures rose more quickly in the 1980s than in the 1990s, primarily because of substantial growth in the use of nursing facility services in the private insurance sector, as well as Medicare policy changes that drove up spending at the end of the decade. Expenditures rose, on average, 11 percent annually in the 1980s, but the growth rate has slowed each year since 1990.

Home health care, on the other hand, continues to be the fastest growing component of national health spending. Since 1980, the share of total health expenditures devoted to home care provided by free-standing agencies has tripled, reaching 2.9 percent. Medicare's share has grown even faster. In the 1980s, about one-quarter of home health services were financed by Medicare; however, this share climbed to 41 percent by 1995.

Expenditures for free-standing home health agencies totaled $29 billion in 1995. With a growth rate of 8.6 percent, spending slowed to single-digit growth for the first time since 1987. Outlays had escalated an average of 18.6 percent a year in the 1980s, from almost $3 billion to $13 billion. Expenditures swelled in 1988, when the Medicare program loosened its coverage rules, and peaked with a 28.2 percent rate of increase in 1990. The growth rate for home health outlays has fallen each year in the 1990s, due mainly to efforts by some payers to rein in both the surge of service users and the intensity of services provided to each user.

Spending by Payment Source

The recent slowdown in national health spending has been driven largely by the cost-containment efforts of private payers. Private insurance expenditures include group plans sponsored by private and public employers and policies purchased by individuals (including supplemental, or medigap, policies bought by Medicare beneficiaries). Due to the slowed spending rates experienced in the private insurance sector, its share of total expenditures recently has decreased. The share attributed to out-of-pocket sources has been falling as well. Out-of-pocket expenditures refer to spending by all individuals on health insurance deductibles, copayment and coinsurance amounts, and noncovered health care goods and services. By contrast, the shares of total spending financed by Medicare and Medicaid have been increasing.

Medicare—Despite reforms in hospital and physician payment policy during the 1980s and early 1990s, Medicare's average spending growth has fallen only slightly (see Table 1-3). The program's expenditures rose 11.6 percent annually in the 1980s, from $37 billion to $112 billion. Expenditure growth fell slightly in the 1990s, to an average annual increase of 10.8 percent. In 1995, however,

Table 1-3. Change in National Health Spending, by Payment Source, 1980-1995 (In Percent)

Payment Source	Average Annual Change		Annual Change				
	1980-1990	1990-1995	1991	1992	1993	1994	1995
Medicare	11.6%	10.8%	9.7%	12.4%	9.1%	11.0%	11.6%
Medicaid	11.2	13.3	24.8	13.1	12.6	8.5	8.4
Other government programs[a]	8.9	5.8	6.6	7.3	4.5	5.6	5.0
Private							
Health insurance[b]	12.8	6.0	8.6	9.8	6.6	2.5	2.6
Out of pocket[c]	9.4	4.2	4.4	7.0	3.5	2.6	3.7
Other[d]	10.0	3.8	5.6	5.5	7.1	0.1	0.8

[a] Includes Departments of Defense and Veterans Affairs; Public Health Service; Federal research; Federal, state, and local workers' compensation; subsidies to hospitals; and public health activities.

[b] Includes premiums paid by employers or unions, employees' share of employer- or union-sponsored premiums, and premiums paid by people with individual policies.

[c] Includes all payments (other than premiums) by individuals, such as deductibles and copayments required by private insurers and public programs when not covered by supplemental insurance.

[d] Includes industrial in-plant health services, private donations, other provider non-patient revenues, and privately financed construction.

SOURCE: Health Care Financing Administration, Office of the Actuary.

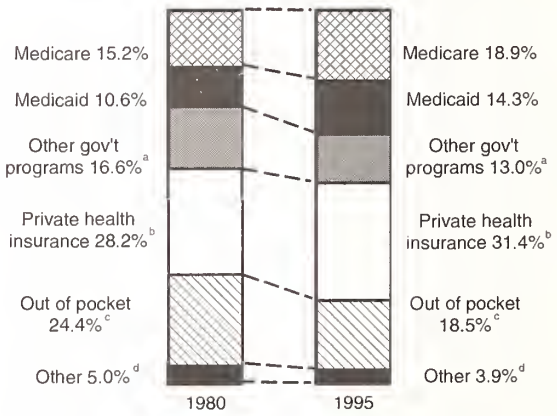
the increase crept back up to 11.6 percent, as spending rose from $168 billion to $187 billion. Except for a 12.4 percent surge in 1992, the growth in 1995 was the highest since 1989.

Medicare's spending growth peaked in 1980, reaching 21 percent, before falling after the program's implementation of hospital prospective payment. The program's spending increases swelled to 13.4 percent in 1989, due primarily to expanded use of nursing facility and home health services following Medicare policy changes. Medicare's share of total health spending rose only slightly in the 1980s, from 15 percent to 16 percent. As other payers limited their cost growth in the 1990s, however, Medicare's share of total spending grew to 19 percent by 1995 (see Figure 1-4).

Continued large spending increases are placing substantial pressures on the Medicare program. The Hospital Insurance (HI) program, which pays for Medicare's inpatient and post-acute care benefits, is particularly affected. The HI program is funded mainly by current revenues from a dedicated payroll tax on employers, employees, and the self-employed, which go to the Medicare HI trust fund.

In 1995, HI expenditures exceeded the trust fund's annual income for the first time, by $2.6 billion or 2.2 percent. Spending outpaced income by $5.3 billion, or 4 percent, in 1996.[5] Despite gaps between HI program annual revenues and expenditures, the program can remain solvent in the short term by drawing from HI trust fund assets. Under current policies, however, these assets are projected to be depleted by early 2001. The gap between HI annual revenues and expenditures is projected to

Figure 1-4. Share of National Health Spending, by Payment Source, 1980 and 1995



Note: Shares may not sum to 100 percent due to rounding.

[a] Includes Departments of Defense and Veterans Affairs; Public Health Service; Federal research; Federal, state, and local workers' compensation; subsidies to hospitals; and public health activities.

[b] Includes premiums paid by employers or unions, employees' share of employer- or union-sponsored premiums, and premiums paid by people with individual policies.

[c] Includes all payments (other than premiums) by individuals, such as deductibles and copayments required by private insurers and public programs when not covered by supplemental insurance.

[d] Includes industrial in-plant health services, private donations, other provider non-patient revenues, and privately financed construction.

SOURCE: Health Care Financing Administration, Office of the Actuary.

grow at a moderate rate through 2010, and then worsen substantially between 2010 and 2030 as the baby boom generation (those born between 1945 and 1965) ages into Medicare. Undergirding these projections is the expected decline in the ratio of workers to beneficiaries, from 3.9 in 1995 to 2.3 in 2030.

The Supplementary Medical Insurance (SMI) program, which pays for Medicare's physician, outpatient, and related medical benefits, is financed by general tax revenues and beneficiary premiums. Because the Congress automatically funds the SMI program each year, it does not face the solvency problems of the HI trust fund. However, high SMI growth rates are reducing the proportion of spending covered by premiums, and exerting increased pressure on general tax revenues and the Federal deficit.

Originally, SMI premiums for aged enrollees were set at 50 percent of expected program costs. (Separate premiums are determined for disabled enrollees.)[6] From 1976 to 1983, however, premium increases for aged enrollees were pegged to Social Security benefit growth, and premium contributions fell from 45 percent to about 25 percent of the expenses of aged enrollees. From 1983 through 1998, aged enrollee premiums have remained near and sometimes been set at 25 percent of program costs. After 1998, however, aged enrollee premium increases are scheduled to be pegged to growth in Social Security benefits once again.

Because of rising program costs and these limits on premium growth, total SMI premium contributions (for both aged and disabled enrollees) fell from accounting for 33 percent of total SMI income in 1995 to 22 percent in 1996.[7] Under current policies set for 1999 and beyond, the share of SMI income coming from aged and disabled premium contributions is projected to decline to 16 percent by 2005 and to continue falling thereafter.

Medicaid—Medicaid program expenditures rose 8.4 percent to $141 billion in 1995, essentially paralleling an 8.5 percent growth rate in 1994. These increases are substantially lower than those of the early 1990s, when Medicaid's spending growth peaked at 24.8 percent. The unusually large increases experienced in 1990 and 1991 were due mainly to increased use of payment adjustments for hospitals serving a disproportionate share of low-income patients. These payments have since been restricted by Federal legislation. Owing to these payments and overall enrollment growth, Medicaid's share of total health spending grew from 10 percent in the 1980s to over 14 percent by 1995.

Although children and their families account for about two-thirds of Medicaid enrollment, more than 70 percent of Medicaid spending finances services for the program's aged and disabled recipients. The vast majority of these are hospital and nursing facility services. As a result, Medicaid accounted for 15 percent of spending for hospital care in 1995 and for 46 percent of expenditures for services in free-standing nursing facilities.

Private Insurance—Private insurers' current spending growth rates are significantly lower than those in the early 1990s, and dramatically below their double-digit increases of the late 1980s. Private insurance spending edged up only 2.5 percent in 1994 and 2.6 percent in 1995, to $311 billion. Since 1990, the average annual increase has been 6.0 percent. By contrast, expenditures grew an average of 12.8 percent annually in the 1980s, from $70 billion to $232 billion. The share of national health spending financed by private insurers grew from 28 percent in 1980 to 33 percent in 1990. However, because of its greater success in containing costs than Medicare and Medicaid, as well as some contraction in employer-sponsored insurance, the private sector's share of national spending fell to 31 percent in 1995.

The continued shift among employers from traditional indemnity insurance to managed care plans helped turn around the private sector's spending experience, producing near zero real growth rates in 1994 and 1995. The managed care plan structure and enrollment patterns responsible for this trend are described later in this chapter.

Out-of-Pocket Spending—Health expenditures financed by individuals' out-of-pocket payments rose 3.7 percent in 1995, from $176 billion to $183 billion. Recent spending increases have been less than half of those in the 1980s. During that time, out-of-pocket spending rose 9.4 percent annually, from $60 billion to $148 billion. Since 1990, though, spending has grown an average of 4.2 percent annually. As a share of national expenditures,

out-of-pocket spending has fallen steadily, from 24.4 percent of total outlays in 1980 to 18.5 percent in 1995.

In the late 1980s, employers began increasing their employee cost-sharing requirements as a strategy to limit health plan expenses. This trend led to predictions that the out-of-pocket spending burden would rise more than it actually has. However, managed care enrollment growth may have countered the effect, since managed care plans generally minimize copayments for their network-provided services and typically insure more services than indemnity plans do. Indeed, since 1990 individuals' payments for physician services—the largest component of out-of-pocket spending—have grown the least, only 0.8 percent annually.

MEDICARE AND OTHER PAYERS

When comparing Medicare with other payers, it is important to remember that all payers operate within the same health care delivery system. Consequently, actions taken by one generally influence the others. However, many factors affect growth in the cost of care differently for people covered by Medicare, Medicaid, and private insurance, as well as for those who are uninsured. This section begins by comparing the trend in per capita expenditures for Medicare and private insurers, and discussing some of the reasons for the contrasting patterns of change. These two groups fund more than three-quarters of the health care services covered by the major payers, and each has played a leading role in controlling the growth in health spending at different points. Then the discussion turns to the relationships among all major payer groups in the hospital industry. (Supplemental data comparing Medicare and other payers for each year from 1980 through 1995 are in Appendix A.)

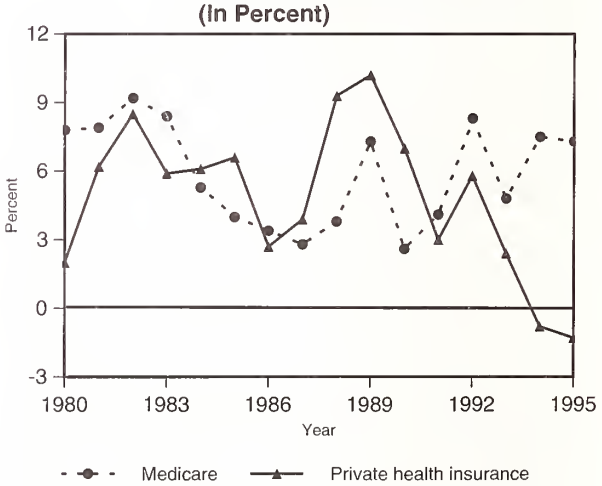
Medicare and Private Health Insurance Spending Trends

The best available source of payer-specific information on per capita spending is the national health expenditures data, which were summarized in the previous section. These data provide comprehensive estimates of expenditures by private insurers and Medicare that are comparable over time. Using a real per capita measure controls for the effects of inflation, along with the different rates of population growth experienced by these groups. Based on these data, this section first compares the trend in overall per capita spending between Medicare and the private sector. That is followed by an analysis of spending by type of provider, which reveals substantial differences in how services funded through these sources are structured.[8]

Per Capita Spending Growth—In the early 1980s, the real increases in Medicare's per capita spending exceeded those in the private sector by an average of about 2 percentage points annually (see Figure 1-5). But this pattern reversed in 1984, the year prospective payment was implemented for Medicare inpatient hospital services. Medicare's increase fell from 8.4 percent to 5.3 percent that year, and it continued to be smaller than that of private insurers by an average of 2 percentage points over the next six years. However, spending growth escalated for both groups in the latter part of the decade. The peak year was 1989, when the real per capita spending increase was 10.2 percent for private insurers and 7.3 percent for Medicare.

The pattern has reversed once again in the 1990s. Private insurers have dramatically reduced their spending growth, while Medicare's annual increases have changed little from the 1980s. Thus, the

Figure 1-5. Real Change in Per Capita Medicare and Private Health Insurance Spending, 1980-1995 (In Percent)



Note: Real per capita spending is adjusted by the consumer price index for all urban consumers (CPI-U-X1). Spending covers personal health care plus program administration and net cost of private health insurance.

SOURCE: Health Care Financing Administration, Office of the Actuary.

recent slowing of overall health spending was accomplished almost entirely in the private sector, with some contribution from the Medicaid program. From 1990 to 1993, the gap between private insurers and Medicare was modest. But over the next two years, private insurers' per capita spending actually fell in real terms while Medicare's increase inched upward. These growth rates differed by more than 8 percentage points in each of these years. The private sector's slower rate is widely believed to be the result of expanding managed care enrollment. As discussed in more detail later in the chapter, managed care penetration has been much more pronounced in the private sector than in the Medicare program.

Per Capita Spending by Type of Provider— The considerably slower real per capita spending growth for private insurers since 1990 was accomplished primarily by controlling hospital and post-acute care services. For the 1980s as a whole, there was almost no difference between private insurers and Medicare in the rate of growth for either hospital or physician services (see Table 1-4). Private insurers did experience somewhat greater increases in post-acute care services, however. The difference was particularly stark for nursing facility services—an 18 percent rate of growth compared with 12 percent for Medicare.

Between 1990 and 1993, private payers held their hospital spending growth to about 1 percent per year, while Medicare's expenditures rose more than 5 percent. The gap widened over the next two years, with private payer spending declining by 2 percent annually after inflation, while Medicare's yearly increase again edged past 6 percent. One of the key factors explaining this difference was the number of admissions, which rose by 13 percent for the aged population between 1990 and 1995 but dropped by 5 percent for the non-aged.[9] Private sector managed care organizations were also able to negotiate substantial payment discounts from hospitals during this period.

Medicare's real per capita spending growth exceeded 30 percent a year for both free-standing nursing facility and home health agency services in the early 1990s. Private insurers' annual increases, conversely, dropped to 1 percent for nursing facilities and 7 percent for home health, after having been in double-digits for most of the previous decade. The dramatic rise in Medicare beneficiaries' use of post-acute care services is due primarily to policy changes in the late 1980s that unleashed additional demand. (See Chapter 4.) Both groups' spending growth for these services fell beginning in 1994, but Medicare's rate of increase remained about 18 percentage points above that in the private sector. The Medicare program's increase was below the private sector's only for physician services between 1990 and 1993. That was due primarily to implementation of Medicare's fee schedule in 1992 and other policy changes affecting physician payment in preceding years.

Private insurers devoted a much smaller share of their total expenditures to inpatient and outpatient hospital care in 1995—36 percent in contrast to 60 percent for Medicare (see Figure 1-6). Conversely,

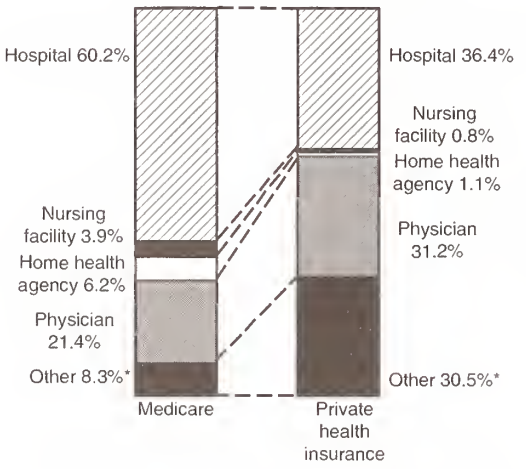
Table 1-4. Average Annual Real Growth in Per Capita Medicare and Private Health Insurance Spending, by Sector, 1980-1995 (In Percent)

Years	Payer	Hospital	Nursing Facility	Home Health Agency	Physician	Other
1980-1990	Medicare	4.1%	11.9%	10.1%	7.7%	8.1%
	Private payers	3.9	17.5	12.6	7.7	10.0
1990-1993	Medicare	5.2	34.1	31.5	-0.3	10.7
	Private payers	1.1	0.9	6.6	6.3	4.8
1993-1995	Medicare	6.4	22.2	17.9	5.6	6.9
	Private payers	-2.5	3.6	-0.1	2.2	-2.8

Note: Real per capita spending is adjusted by the consumer price index for all urban consumers (CPI-U-X1). Spending covers personal health care plus program administration and net cost of private health insurance.

SOURCE: Health Care Financing Administration, Office of the Actuary.

Figure 1-6. Share of Real Per Capita Medicare and Private Health Insurance Spending, by Sector, 1995



Note: Real per capita spending is adjusted by the consumer price index for all urban consumers (CPI-U-X1). Spending covers personal health care plus public program administration and net cost of private health insurance.

* Includes personal health care (dental services, other professional services, drugs and other medical non-durables, vision products and other medical durables) and research, construction, public health activities, administration of public programs, and net cost of private health insurance.

SOURCE: Health Care Financing Administration, Office of the Actuary.

the share going to physicians is considerably higher among private insurers—31 percent compared with 21 percent. These varying service compositions reflect differences in patient mix as well as in the way care is provided. Medicare's share of expenditures is far higher for post-acute care services—almost four times higher for nursing facilities and 10 times greater for home health care. This results from a greater incidence of chronic conditions among the elderly, differences in practice patterns, and incentives related to payment methods. Finally, private payers spend much more for services in the "other" category, due primarily to extensive drug benefits in their policies. Medicare coverage of outpatient pharmaceuticals is limited, except as an extra benefit that may be offered by Medicare managed care plans.

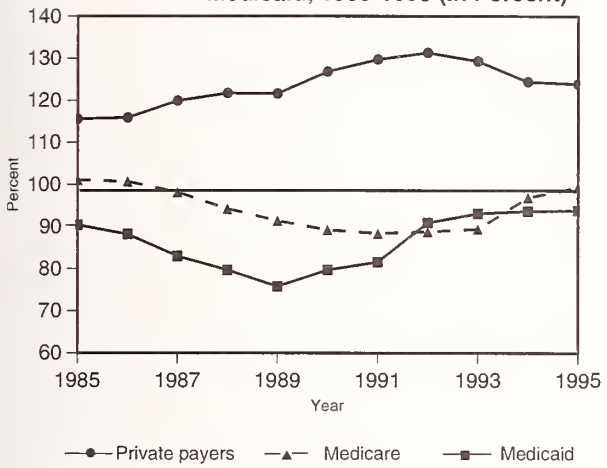
Health Insurance Premiums—Data on insurance premiums have often been cited as evidence of reduced private sector health spending, but premiums do not accurately measure private sector expenditures. The main problems are that they include profits and changes in reserves, which makes it difficult to sort out short-term pricing tactics from fundamental cost changes, and that they incorporate changes in covered services and cost sharing. Health insurers historically have gone through a three-year cycle of premium increases that exceed underlying cost growth (and build up reserves), followed by a similar cycle of increases that underprice cost growth (and deplete reserves). The health insurance industry likely ended an overpricing cycle in 1992 and then entered a period of underpricing.[10] Premium data show a larger reduction in the annual growth rate since 1990 than the Health Care Financing Administration's (HCFA) national health expenditure data (a drop of about 9 percentage points rather than 7), which would be consistent with this insurance cycle.[11] In addition, premium estimates are based on surveys that are subject to sampling variability and generally lack data from small employers. For these reasons, reported changes in employers' premiums should be interpreted with caution.

Interactions Among Hospital Payers

Most health care providers receive payment from many sources. Thus, cost-containment efforts initiated in one segment of the delivery or financing system can affect other parts of the health care system, often in unanticipated ways. In the hospital sector, the payment policies of private payers and Medicare, as well as those of Medicaid and other government programs, are clearly related. However, the nature of these relationships has changed substantially. This section discusses two distinct phases in the relationship of hospital payers, 1985 to 1991 and 1991 to 1995.

Relationships from 1985 to 1991—Medicare's PPS for inpatient hospital services was implemented in 1984 with expectations of substantial cost containment. That did occur initially; the increase in PPS costs per case was held to less than 2 percent in the first year. This helped create a situation in 1985 and 1986 where payments exceeded costs for all the Medicare-covered services that hospitals provide (see Figure 1-7).[12] Subsequently, hospital per case cost growth returned to about 9 percent a year for the rest of the decade. Medicare's PPS payment increases remained considerably below this level, and policy changes in the next several years restrained payments for capital and outpatient services as well. Consequently, the Medicare payment to cost ratio fell from about 101 percent in 1986 to a low

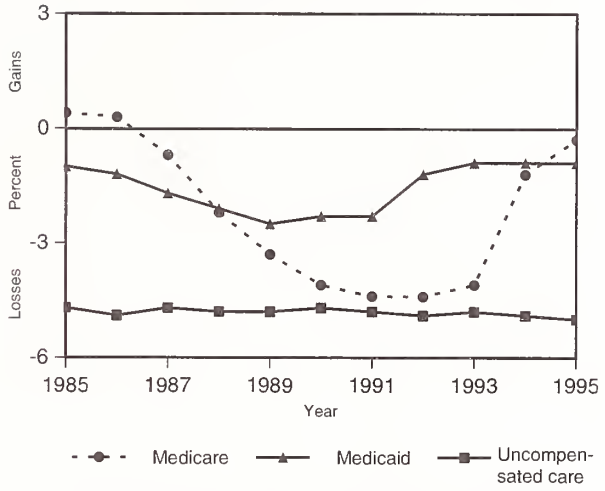
Figure 1-7. Hospital Payment to Cost Ratios for Private Payers, Medicare, and Medicaid, 1985-1995 (In Percent)



Note: Payment to cost ratios cannot be used to compare payment levels because the mix of services and cost per unit of service vary across payers. They do, however, indicate the relative degree to which payments from each payer cover the costs of treating its patients. The data are for community hospitals and reflect both inpatient and outpatient services. Imputed values were used for missing data. Most Medicare and Medicaid managed care patients are included in the private payers category.

SOURCE: ProPAC analysis of data from the American Hospital Association Annual Survey of Hospitals.

Figure 1-8. Losses as a Percentage of Total Hospital Costs for Medicare, Medicaid, and Uncompensated Care, 1985-1995



Note: Losses are the difference between the cost of providing care and the payment received. Operating subsidies from state and local governments are considered payments for uncompensated care, up to the level of each hospital's uncompensated care costs. The data are for community hospitals and reflect both inpatient and outpatient services. Imputed values were used for missing data. Most Medicare and Medicaid managed care patients are included in the private payers category.

SOURCE: ProPAC analysis of data from the American Hospital Association Annual Survey of Hospitals.

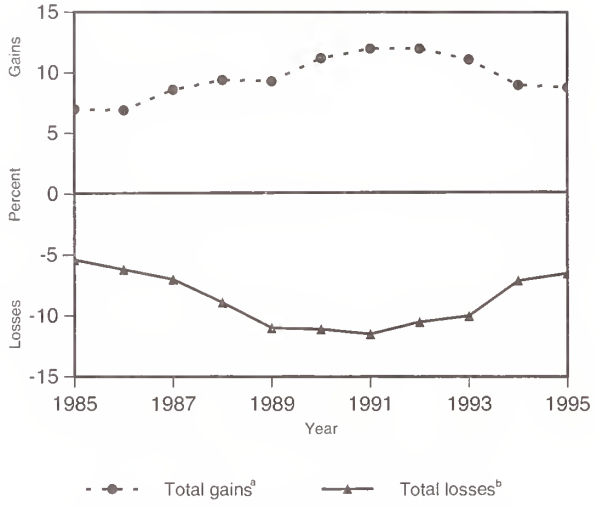
point of 88 percent in 1991. The state Medicaid programs constrained their payments even more during this period, so that the national Medicaid payment to cost ratio dropped from 90 percent to a low of 76 percent in 1989.

This ongoing moderate payment growth, as costs continued to rise, led to a substantial increase in hospitals' aggregate patient care losses (encompassing Medicare, Medicaid, other government payers, and uncompensated care). A small gain from treating Medicare patients in 1985 and 1986, when costs were held in check, deteriorated to losses equaling 4.4 percent of hospitals' total expenses by 1991, as costs rapidly escalated (see Figure 1-8). Losses from the Medicaid program also rose sharply, from 1.0 percent to 2.5 percent of total costs. Hospitals have always had substantial uncompensated care losses, but this burden remained stable during this period at about 4.8 percent of the hospital cost base. Thus, government programs went from a minor financial concern in 1985 to the predominant source of losses in 1991. Combined losses from government programs and uncompensated care roughly doubled as a share of total expenses over this span (see Figure 1-9).

The hospital industry as a whole responded to these higher losses by obtaining additional revenue from private insurers rather than reducing cost growth. The ability of individual hospitals to rely on this strategy, widely known as cost shifting, varied markedly, however. (See Chapter 3.) Hospitals usually accomplished the increase in revenue by raising their charges, or list prices, which affects all insurers that pay on the basis of full or discounted charges. Consequently, aggregate charges for services provided to privately insured patients grew much faster than actual net revenue. The average markup of charges over costs rose by 30 percentage points from 1985 to 1991, more than double the growth of payments relative to costs (see Figure 1-10).

The increase in private payer gains as a percentage of total costs nearly mirrored the growth in combined losses as a share of costs during this period.[13] This resulted from the private payer payment to cost ratio rising from 116 percent to 130 percent. Successful use of cost shifting allowed most hospitals to keep their cost inflation several percentage points above the level set by Medicare payment policy,

Figure 1-9. Total Gains and Total Losses as a Percentage of Hospital Costs, 1985-1995



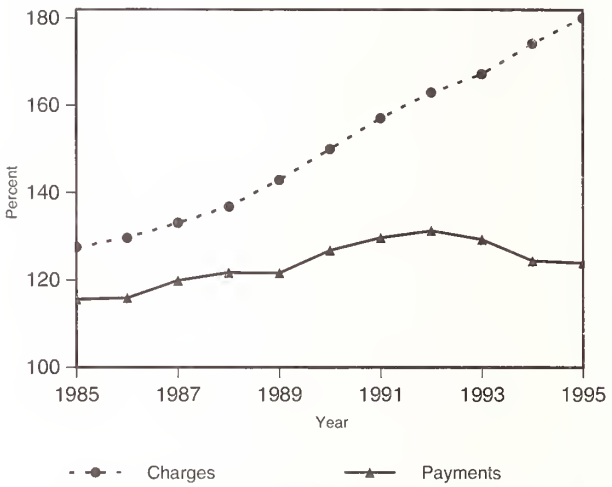
Note: Gains and losses are the difference between the cost of providing care and the payment received. Operating subsidies from state and local governments are considered payments for uncompensated care, up to the level of each hospital's uncompensated care costs. Excludes non-patient care income. The data are for community hospitals and reflect both inpatient and outpatient services. Imputed values were used for missing data. Most Medicare and Medicaid managed care patients are included in the private payers category.

[a] From private payers and operating subisides above uncompensated care costs.

[b] From Medicare, Medicaid, other goverment payers, and uncompensated care.

SOURCE: ProPAC analysis of data from the American Hospital Association Annual Survey of Hospitals.

Figure 1-10. Private Payer Hospital Charges and Payments as a Percentage of Private Payer Costs, 1985-1995



Note: Charges represent the amount that would have been collected if all patients paid full price. Payments are the amounts actually received. The data are for community hospitals and reflect both inpatient and outpatient services. Imputed values were used for missing data. Most Medicare and Medicaid managed care patients are included in the private payers category.

SOURCE: ProPAC analysis of data from the American Hospital Association Annual Survey of Hospitals.

while maintaining their total margins at or above the levels prevailing prior to 1984.[14]

Relationships from 1991 to 1995—In the early 1990s, employers began to demand smaller increases in their premiums. Many private insurers responded by developing more managed care products and negotiating discounts with hospitals and other providers to restrain their own growing expenditures. Under mounting financial pressure from private insurers, hospitals started to control their costs. As a result, in 1992 Medicare's payment increase matched the rise in Medicare costs for the first time in seven years. Medicaid's ratio, however, climbed from 82 percent to 91 percent. This unusually large one-year jump was due not only to the slower cost growth, but to expanded use of disproportionate share payments linked to Federal matching of revenues obtained from provider taxes and other sources. The influx of Medicaid monies paved the way for a slight drop in the combined losses from government programs and uncompensated care for the first time since before PPS began. The smaller losses, however, went entirely to raising total margins that had dropped in the late 1980s, rather than to scaling back cost shifting to private insurers.

Since 1992, there has been a considerable deceleration in hospital cost growth, including a decline in inflation-adjusted per case costs. (See Chapter 3.) Since Medicare's payment increases remained roughly constant, the slowdown in cost growth led to a major improvement in the Medicare payment to cost ratio in 1994, from about 90 percent to almost 97 percent. The trend continued in 1995, with this ratio rising to 99 percent. At that payment level, Medicare losses fell to a scant 0.3 percent of total costs, from more than 4 percent just two years earlier. Medicaid losses were unchanged during this period, following the enactment of constraints on the growth of disproportionate share payments, and uncompensated care losses have risen only marginally.

This scenario of smaller overall losses has made it possible for hospitals to absorb sharp reductions

in payments from private payers relative to costs while still raising their total margins. The private sector payment to cost ratio declined from its 1992 peak of 131 percent to 124 percent in 1995. Gains from private insurers have fallen by one-fourth to 8.6 percent of total expenses, and most of the shortfall they cover is once again made up of uncompensated care rather than losses from government-sponsored patients.

Despite the relative reduction in private sector payments, however, charges have grown faster than ever. By 1995, the average markup of charges over costs had reached 80 percent, nearly triple the average margin of net revenue over costs. This reflects the fact that few patients or insurers pay billed charges. Moreover, many managed care companies have turned to direct negotiation of payments, often in terms of per diem rates or diagnosis-related groups, rather than structuring their payments as a percentage discount off charges. The relationship of the amount paid to the costs of care spans a wide range, from the few that do pay full charges to large managed care companies that pay little or no markup. This disparity raises serious questions of equity.

THE CHANGING FINANCING ENVIRONMENT

Changes in health plan enrollment and financing have been critical to health care cost-containment efforts since the late 1980s. The trend in managed care enrollment in the private insurance sector, Medicare, and Medicaid is presented in this section, along with changes in individuals' cost sharing and premium contributions. Despite continued growth in medical care capacity over the last three decades, however, problems of access to care still remain. Many people lack any insurance coverage, and some of the insured pay a burdensome amount out of pocket for services. The chapter concludes with a review of these overall coverage trends.

The Expansion of Managed Care

A key contributor to the recent declines in national spending growth, particularly in the private sector, is the expansion of managed care. Managed care plans have successfully controlled their cost growth through a combination of selective provider contracting; discount price negotiation; risk sharing payment methods; utilization control practices that limit service volume and intensity; and, in some cases, favorable selection (that is, enrolling a disproportionate share of relatively healthy people).[15]

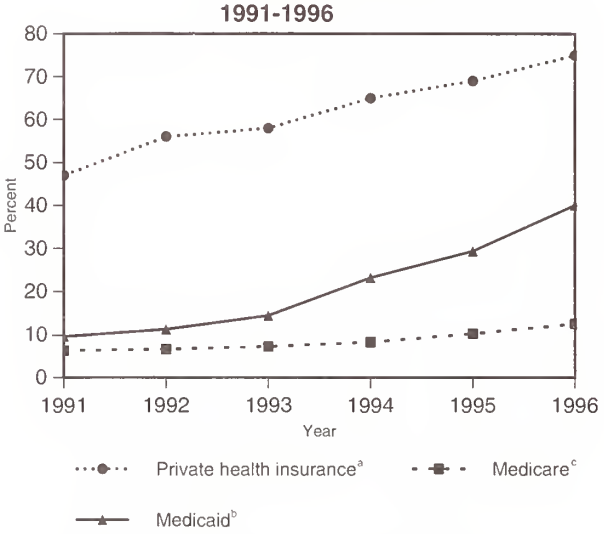
The array of managed care products has increased greatly, as has the difficulty in differentiating among them. Health maintenance organizations (HMOs) both insure and provide health care to an enrolled population at a negotiated per capita rate. They generally are structured along one of four types: independent practice association (IPA), network, group, and staff. IPA HMOs contract with numerous solo physicians or small-group practices, whereas network plans contract with several larger group practices. Group model HMOs contract with a single large medical group practice, and staff model HMOs provide care through salaried employees.

Most HMOs pay their physician groups a negotiated per capita rate, which is then distributed in a variety of ways among the group's physicians. By sharing financial risk with their physicians, HMOs effectively encourage medical practice styles that limit utilization and costs. The use of primary care providers as gatekeepers to specialty services and the development of clinical practice standards are key aspects of many HMOs' utilization control methods.

Insurance companies developed preferred provider organizations (PPOs) as a lower cost alternative to traditional indemnity insurance, while offering greater provider choice than HMOs. PPOs selectively contract with a panel of solo physicians or group practices and usually pay on a discounted fee-for-service basis. Enrollees may use providers outside the panel, but are subject to substantially higher deductibles and copayments when they do. The point-of-service (POS) plan introduced in the early 1990s is the newest arrangement. These plans mimic HMOs in their use of primary care gatekeepers to authorize in-panel, and sometimes other, service use. POS plans are also similar to PPOs in that they cover services provided by non-panel providers, albeit at substantially higher deductible and copayment levels.

The share of the population covered by some type of managed care has increased dramatically in the 1990s (see Figure 1-11). This trend is particularly

Figure 1-11. Share of Insured Population Enrolled in Managed Care Plans, by Payment Source, 1991-1996



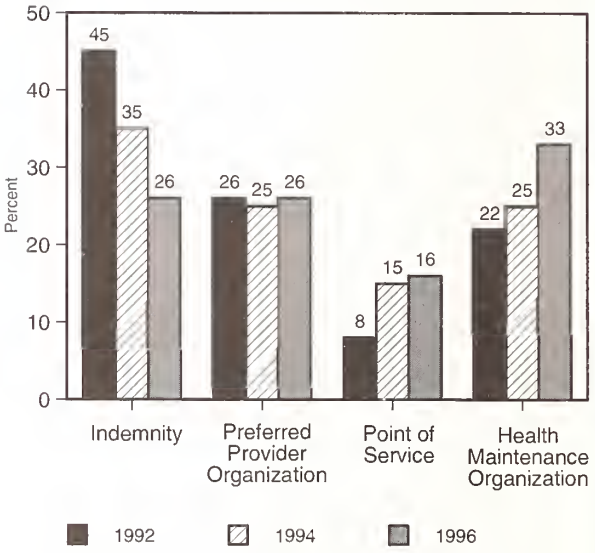
[a] Includes health maintenance organizations (HMOs), preferred provider organizations, and point-of-service plans.

[b] Includes HMOs, prepaid health plans, fee-for-service plans with primary care case management, and health insuring organizations.

[c] Includes risk and cost plans as of December each year.

SOURCE: KPMG Peat Marwick LLP, *Health Benefits in 1996*, and the Health Care Financing Administration, Office of the Actuary and Office of Managed Care.

Figure 1-12. Share of Employees in Selected Health Plans, 1992-1996



Note: Data are for firms with 200 or more employees. Shares do not add to 100 percent due to rounding.

SOURCE: KPMG Peat Marwick LLP, *Health Benefits in 1996.*

pronounced in the private sector and the Medicaid program. Medicare also has experienced high managed care growth rates, although overall enrollment remains relatively low.

Private Insurance—An annual survey of firms with at least 200 workers found that 75 percent of insured employees were enrolled in a managed care plan in 1996.[16] One-third of employees were in HMOs, one-quarter in PPOs, and 16 percent in POS plans (see Figure 1-12). In addition, a similar survey of firms with fewer than 200 employees found that managed care enrollment has expanded tremendously in the small business sector. The share of small-firm employees in managed care more than doubled in two years, from one-third in 1993 to about 70 percent in 1995.[17]

While the penetration of managed care enrollment in the private sector has increased steadily in the 1990s, the mix of plan enrollment has changed somewhat. Between 1992 and 1994, most of the managed care growth among medium-sized and large firms occurred in POS plans. This type of coverage almost doubled, from 8 percent to 15 percent of employees, while the share choosing HMOs grew more modestly, from 22 percent to 25 percent. From 1994 to 1996, however, the POS share of enrollment rose only slightly to 16 percent, while HMOs expanded to 33 percent. PPOs remained at the same 26 percent share they had in 1992. By contrast, a survey of firms with at least 500 workers found that growth has been more evenly split between HMOs and POS plans over the last two years. Among these large firms, managed care enrollment in 1996 grew to 27 percent in HMOs, 19 percent in POS plans, and 31 percent in PPOs.[18]

As managed care enrollment has grown, the market share held by indemnity plans has steadily declined, from 45 percent in 1992 to 26 percent in 1996. In the last year, their share was surpassed by HMOs for the first time. However, even these indemnity plans have been adopting some utilization controls, such as precertification and second opinion requirements for elective surgery. Almost 90 percent of indemnity plans use precertification.[19]

Medicaid—Enrollment in Medicaid managed care programs jumped 37 percent, from 9.8 million people in 1995 to 13.3 million in 1996. Currently, 40 percent of all Medicaid recipients are in

managed care plans. Medicaid managed care has grown dramatically since 1991, when only 2.7 million, or 9.5 percent of program participants, were enrolled.[20]

Medicaid programs mainly use three managed care arrangements: HMOs, prepaid health plans (PHPs), and primary care case management (PCCM) plans. Medicaid's HMOs are similar to those in the private sector, while the PHPs are HMO-like plans established mainly in community-based health clinics. Most of the HMOs and PHPs are full-risk capitated health plans, meaning they are liable for the full costs of treating their members. Some HMOs and PHPs are paid by a combination of capitation and fee-for-service methods, and thus are limited-risk plans. The PCCM plans are fee-for-service arrangements that use primary care physicians as case managers. The case managers must provide or authorize the use of services by PCCM enrollees. Although enrollment growth has occurred in all three plan types, it has been highest among HMOs. Medicaid HMO enrollment has increased fivefold since 1991, from 1.3 million to 8.0 million in 1996. HMOs account for 68 percent of the program's managed care plans and more than half of total managed care enrollment.

States must seek Federal waivers of sections of the Social Security Act before they can limit Medicaid recipients' choice of providers, alter benefits, or change eligibility rules. Section 1115 waivers allow for research and demonstration projects through which states explore innovations in benefits design and eligibility rules. In the Omnibus Budget Reconciliation Act of 1981, the Congress added another waiver authority in Section 1915(b) of the Social Security Act. These are programmatic waivers, which allow changes in Medicaid program administration rather than explicit changes in covered benefits or eligibility rules. This simpler waiver has facilitated the development of Medicaid managed care plans.

Medicaid managed care programs are targeted at, and in some areas required for, those in the Aid to Families with Dependent Children program and other non-aged, non-disabled adult recipients. However, this group accounts for well under half of Medicaid spending, while the majority is for services provided to the program's disabled and aged recipients. Although some programs are experimenting with managed care for their disabled population, issues such as benefits coordination for recipients also eligible for Medicare make it difficult to expand managed care to Medicaid aged and disabled beneficiaries. (See Chapter 2.)

Medicare—At 12.5 percent, Medicare's managed care enrollment rate in 1996 remained far lower than penetration in the private sector and Medicaid program. However, Medicare's managed care enrollment has grown rapidly in recent years, increasing nearly 25 percent in both 1995 and 1996.

Several factors contribute to Medicare's lower managed care enrollment rate. First, Medicare beneficiaries do not face large price differentials that encourage selecting a managed care option, as do most privately insured persons. Beneficiaries paying for supplementary (or medigap) insurance, however, have a greater incentive to enroll in managed care plans, since these often provide at a lower cost services covered by supplemental insurance. Second, unlike a growing number of Medicaid programs and some employer-sponsored plans, fee-for-service insurance remains an option—indeed the basic coverage system—for Medicare beneficiaries. Moreover, although managed care plan participation is rising, about one-third of beneficiaries live in areas not covered by any Medicare-participating plan. Finally, Medicare beneficiaries simply may be more familiar with the fee-for-service system, or may prefer the provider choices it allows.

Growth in Individual Financing Responsibility

Because traditional indemnity insurance was still the predominant type of employer-sponsored health plan in the late 1980s, many employers' initial response to runaway health costs was limited to methods compatible with that approach. One of the most common strategies was to impose or increase employee cost sharing, in the form of either premium contributions or copayments and deductibles. In addition to producing direct savings for the employer, this approach may have helped brake health spending by providing an incentive for employees and their dependents to constrain their use of services.

The proportion of firms requiring premium contributions in their indemnity plans was still rising in the early 1990s. Between 1992 and 1994, for example, the share of firms incorporating such requirements for individual policies increased from 59 percent to 73 percent (see Figure 1-13). Since then, though, the percentage has actually dropped slightly, suggesting that the slowing of per capita health spending in recent years may have eased the financial pressure that some employers face. The share of firms requiring a premium contribution is similar across indemnity and managed care plans, and it has also fallen in recent years in all three types of managed care. While more firms are covering the entire premium, those workers who do pay were asked to shoulder a somewhat larger proportion of the total premium in 1996. Moreover, compared with the early 1990s, today fewer employees have the option to choose an indemnity plan.[21]

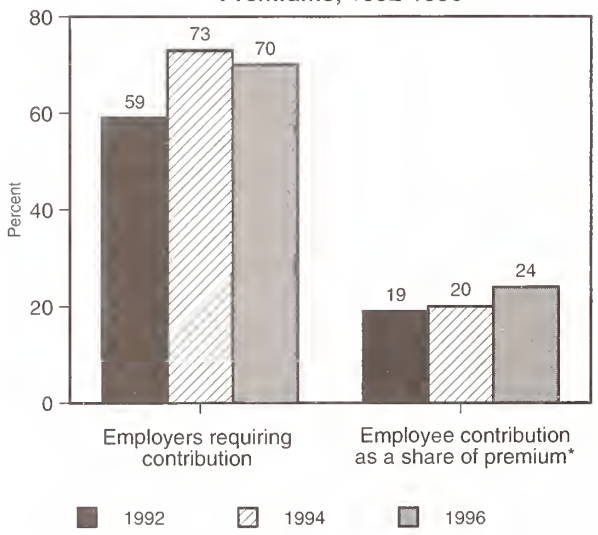
Changes in Insurance Coverage

Between 1988 (the earliest year for which comparable data are available) and 1993, the proportion of the nonelderly population covered by employer-based insurance dropped from 73.3 percent to 66.7 percent (see Table 1-5). The reasons for this decline include the increasing real cost of insurance, competitive pressures that leave firms searching for additional ways to cut costs, and changing industry and firm size trends.[22]

Some of this loss was offset by expanded Medicaid eligibility, both as mandated by the Congress and as implemented by some states under waivers. The share of the population covered by Medicaid rose from 8.5 percent to 12.7 percent from 1988 to 1993. In addition, the number of non-aged disabled people covered by Medicare increased slightly, and some of those losing employer coverage were able to obtain individual policies. But these sources combined were insufficient to prevent a continued rise in the proportion of people without any insurance, from 15.2 percent to 17.3 percent. Moreover, the share of the insured population considered to have inadequate coverage for catastrophic illness rose substantially during the 1980s, from 12.6 percent to 18.9 percent, and has declined only marginally since then.[23]

The recent slowing of health spending will make health insurance more affordable than it otherwise would have been. However, there has thus far been little evidence of a payoff in terms of improved insurance coverage. From 1993 to 1995, the proportion of the population covered by employer-based insurance did increase slightly, from 66.7 percent to 67.0 percent. But this favorable outcome was partly offset by a small decline in Medicaid coverage, which may be linked to an expanding

Figure 1-13. Employee Contribution to Indemnity Health Insurance Premiums, 1992-1996



Note: Data are for individual policies in firms with 500 or more employees.

* In firms that require an employee contribution.

SOURCE: Foster Higgins, *National Survey of Employer-Sponsored Health Plans*, 1992, 1994, and 1996.

Table 1-5. Health Insurance for the Nonelderly Population, by Source, Selected Years (In Percent)

Source	1988	1993	1995
Employer*	73.3%	66.7%	67.0%
Individual	5.5	6.7	6.9
Medicare	1.5	1.6	1.8
Medicaid	8.5	12.7	12.5
Uninsured	15.2	17.3	17.4

Note: Shares add to more than 100 percent because some individuals receive coverage from more than one source.

* Includes the Civilian Health and Medical Program of the Uniformed Services and the Civilian Health and Medical Program for the Department of Veterans Affairs. Excludes active duty military personnel.

SOURCE: Employee Benefit Research Institute, *Sources of Health Insurance and Characteristics of the Uninsured: Analysis of the March 1996 Current Population Survey*, Issue Brief Number 179, 1996.

economy or to welfare reform. The uninsured population still edged up during this period from 17.3 percent to 17.4 percent. In addition, the share of hospital expenses devoted to providing uncompensated care (which comes from both the underinsured and the uninsured) reached 6.1 percent in 1994—its highest level in six years—and remained there in 1995.[24] The increase over earlier years was small, but it provides further evidence that little progress has been made to date in eliminating financial barriers to health care access.

Between 1988 and 1995, the uninsured population rose from 32 million to 40 million. These data count the number of persons who lack insurance at a point in time. However, estimates for 1992 suggest that an additional 12 million people experienced a lapse in coverage of at least one month during the year.[25] The median spell among those who lacked insurance at any time in the year was six months.

CONCLUSIONS AND CHALLENGES

The health care financing and delivery system is rapidly being transformed. Many health care purchasers are shifting from fee-for-service coverage, which encouraged growth in the price and quantity of services, to managed care plans that offer incentives to control the costs of care. Use of hospital inpatient services is declining, while more services are being provided in ambulatory and post-acute settings. Providers are responding to these changes by establishing new relationships and roles to secure their market position and collectively manage risk. Payers are becoming more directly involved in managing the spectrum of services provided to those they insure, while negotiating lower prices across a wide range of settings.

This transformation has already been successful in slowing health care cost growth. In 1994 and 1995, the nation had the smallest health spending increases since before the legislation establishing the Medicare and Medicaid programs was enacted. Further, CBO has projected an average growth rate for national health spending through the end of the decade that is only fractionally above what was achieved these last two years. Accomplishing this poses a major challenge, however.

The recent slowing of health spending has been concentrated almost entirely among those with private insurance. In real per capita terms, health spending in the private sector actually decreased the last two years, while Medicare's rate of expenditure growth rose slightly. However, one-time savings produced from shifting to managed care may have already occurred in much of the private sector. Managed care's task for the future will be to maintain its rates of spending growth in the face of new pressures from patients and providers. For example, legislatures are loosening health plan restrictions on providers, which may erode some of managed care's cost-control capabilities, and consolidation in the provider industry may strengthen its bargaining position with purchasers. Finally, continued technological advancements will almost inevitably make real spending declines unsustainable. Signs of these pressures may already be appearing: Managed care industry profits are declining and industry experts are predicting that premiums will rise after years of little or no growth.[26]

Regardless of whether the current abating trend in private sector spending continues, there will be pressure for more progress in controlling Medicare's expenditures, which account for about a quarter of all spending. The primary challenge is to curb the steady rise in Medicare beneficiaries' use of services, particularly post-acute and hospital outpatient care, through better integration of payments and strengthened managed care programs. Controlling Medicaid outlays, which account for another sixth of payer spending, will also be important.

The challenges facing the American health care system in this rapidly evolving environment also go beyond controlling expenditures. There is an ongoing need to make certain that efforts to deliver care more efficiently do not reduce access to appropriate services or compromise the quality of care. Moreover, the broader social goals of the health care system must be protected, including training future generations of health professionals and meeting the needs of the ever-increasing uninsured population. These problems will have to be addressed by public and private payers along with the provider community, in the course of charting the nation's future health policy.

Notes to Chapter 1

1. National health expenditure data are compiled by the Health Care Financing Administration. Expenditures consist of spending for all personal care services furnished by hospitals; free-standing nursing facilities; free-standing home health agencies; physicians (including most ambulatory care facilities); dentists; allied professionals; and drugs, medical equipment, vision products, and other miscellaneous items. Expenditure estimates also include the costs of public program administration, the net cost of private health insurance, government public health activities, research, and facility construction.

2. Hospital expenditure data as currently reported to HCFA's Office of the Actuary include spending for all services provided in hospitals. HCFA is developing separate estimates for hospital-based nursing facility and home health services, due next year.

3. Community hospitals include all non-Federal short-term acute care facilities (excluding psychiatric facilities).

4. Data developed by the Department of Commerce, Bureau of the Census, *Service Annual Survey: 1994*, as reported in Katharine R. Levit and others, "National Health Expenditures, 1995," *Health Care Financing Review* 18(1):175-214, Fall 1996.

5. The Board of Trustees, Federal Hospital Insurance Trust Fund, *1997 Annual Report of the Board of Trustees of the Federal Hospital Insurance Trust Fund* (Washington, DC: April 24, 1997).

6. The non-aged disabled have been eligible for Medicare since 1973. Between 1973 and 1996, premiums for this group have covered from 13 percent to 33 percent of related program costs.

7. The Board of Trustees, Federal Supplementary Medical Insurance Trust Fund, *1997 Annual Report of the Board of Trustees of the Federal Supplementary Medical Insurance Trust Fund* (Washington, DC: April 24, 1997).

8. Both the private sector and Medicare measures include administrative costs and exclude individuals' out-of-pocket expenses. For Medicare, administrative expenses include the costs of managing the program and collecting payroll taxes to finance the Hospital Insurance trust fund. For private payers, these expenses are measured as the net cost of insurance. To focus solely on the health services received by each population group, the national health expenditure accounts covering public health activities, research, and construction were omitted from the analysis.

9. Based on data for all community hospitals from the American Hospital Association (AHA) National Hospital Panel Survey. In 1995, private payers accounted for about 60 percent of hospitals' care for nonelderly patients, with the rest devoted to Medicaid and other government-sponsored patients plus uncompensated care. More detailed information on the admissions trend and changes in hospital length of stay is included in Chapter 3.

10. Lynn Etheredge, *Is the Health Care Cost Crisis Over? A Review of Recent Evidence on Health Care Prices, Expenditures, and Insurance Premiums* (Washington, DC: National Health Policy Forum, May 1994).

11. KPMG Peat Marwick LLP, *Health Benefits in 1995* (San Francisco: KPMG, 1995). These data include only premiums for group insurance sponsored by public and private employers with 200 or more workers.

12. The Medicare margin implied by the 1986 payment to cost ratio is 0.7 percent, which is substantially below the Medicare inpatient margin of 8.6 percent presented in Chapter 3 for roughly the same time period. However, two basic differences in the structure of these measures make them incomparable. First, the AHA Annual Survey data used in calculating payment to cost ratios by payer include all expenses reported by hospitals on their public financial statements. The Medicare inpatient margin, by contrast, includes only Medicare-allowable

costs as reported on hospitals' annual Medicare Cost Reports. These exclude expenses that are not reasonably related to the patient care provided to Medicare beneficiaries, such as interest on working capital, donations, advertising, or incentive payments made to practicing physicians. This factor alone is believed to account for a difference of about 4 percentage points.

Second, the AHA data encompass all Medicare-covered services provided by any community hospital, while the Medicare inpatient margin is restricted to inpatient services covered by prospective payment. The additional services reflected in the AHA measure include admissions to many PPS-excluded hospitals (rehabilitation, children's, and cancer); admissions to distinct-part rehabilitation units in PPS hospitals; all outpatient services (emergency room, clinic, and surgical); and hospital-based skilled nursing facility and home health care services. Although comparable data are not available for these non-PPS services individually, most are believed to have payments that cover a smaller share of costs, on average, than PPS does.

13. In addition to gains from treating privately insured patients, some public hospitals receive operating subsidies beyond the level needed to offset their uncompensated care costs. In aggregate, however, these extra subsidies have accounted for only 0.2 percent to 0.4 percent of hospitals' total expenses.

14. The trends in hospitals' total margins and their margins on Medicare inpatient services are discussed in Chapter 3.

15. Joseph P. Newhouse, "Reimbursing Health Plans and Health Providers: Selection Versus Efficiency in Production," *Journal of Economic Literature* 34(3):1236-63, September 1996; Mark Schlesinger and David Mechanic, "Challenges for Managed Competition from Chronic Illness," *Health Affairs* 12:123-37, Supplement 1993; Alain C. Enthoven, *Theory and Practice of Managed Competition in Health Care Financing* (Amsterdam: North Holland Press, 1988); and Harold S. Luft and Robert H. Miller, "Patient Selection in a Competitive Health Care System," *Health Affairs* 7(3):97-119, Summer 1988.

16. KPMG Peat Marwick LLP, *Health Benefits in 1996* (San Francisco: KPMG, 1996).

17. Gail A. Jensen and others, "The New Dominance of Managed Care: Insurance Trends in the 1990s," *Health Affairs* 16(1):125-36, January/February 1997.

18. Foster Higgins & Co., Inc., *National Survey of Employer-Sponsored Health Plans, 1996* (New York: Foster Higgins, 1997).

19. KPMG Peat Marwick LLP, *Health Benefits in 1996*, 23.

20. Health Care Financing Administration, Office of Managed Care, Medicaid Managed Care Section.

21. Foster Higgins, *National Survey of Employer-Sponsored Health Plans, 1996,* 10.

22. Paul Fronstin and Sarah C. Snider, "An Examination of the Decline in Employment-Based Health Insurance Between 1988 and 1993," *Inquiry* 33(4):317-25, Winter 1996/97. The industry structure factors cited by the authors as playing an important role in constraining employer-based coverage are increased use of part-time workers (who usually do not receive benefits) and employment shifts to small businesses and service firms (both of which are less likely to offer insurance).

23. Pamela F. Short and Jessica S. Banthin, "New Estimates of the Underinsured Younger Than 65 Years," *Journal of the American Medical Association*, 274(16):1,302-6, October 25, 1995. Individuals were considered underinsured in this research when the out-of-pocket expenditures they are responsible for exceed 10 percent of their family income.

24. Based on ProPAC analysis of data from the AHA Annual Survey of Hospitals. This measure reflects both entire cases for which no payment was received and unpaid deductibles and coinsurance.

25. Employee Benefit Research Institute, *Sources of Health Insurance and Characteristics of the*

Uninsured: Analysis of the March 1996 Current Population Survey (Washington, DC: EBRI, 1996) 1-4.

26. Mike McNamee, Gail DeGeorge, and Ron Stodghill, "Health-Care Inflation: It's Back," *Business Week*, March 17, 1997; Ron Winslow, "Health-Care Costs May Be Heading Up Again," *Wall Street Journal*, January 20, 1997; Milt Freudenheim, "After a Lull, Medical Costs Are Once Again on the Rise," *New York Times*, January 21, 1997; "'96 Hard on Health Plan Industry," *Minneapolis Star-Tribune*, April 1, 1997; "HMO Enrollments Rise But Profits Drop," *Jacksonville Business Journal*, March 28, 1997.

Chapter 2

Medicare Managed Care

Chapter 2

Medicare Managed Care

Contracting with managed care plans offers several advantages to Medicare. It has the potential to contain costs through capitation payments and use of a limited network of providers to furnish services. At the same time, Medicare managed care enrollees receive benefits equal to or greater than those in the fee-for-service option. Managed care contracting also permits Medicare to delegate to plans the responsibility of determining the most cost-effective way to provide care. Finally, with capitation Medicare can shift financial risk to plans, making its spending more predictable in each year.

Operating managed care programs requires Medicare to take on important responsibilities, among them setting payment rates, monitoring beneficiary enrollment and plan participation, and evaluating plan performance. One of the more difficult challenges is setting capitation rates that reflect the costs of efficient service provision. The payment rates should be high enough to attract plans and beneficiaries, while providing savings to Medicare. They also should be higher for beneficiaries expected to use more services and lower for those who probably will use fewer.

In running Medicare's managed care program, additional issues arise. One is plan participation, which dictates whether beneficiaries have access to a managed care option at all. Others include determining whether managed care options are suitable for special populations and ensuring that plans provide quality care. Especially troubling is the incentive under capitation not only to limit service use, but also to restrict access to care. Medicare quality initiatives are aimed both at improving beneficiary protection and at promoting competition among plans on the basis of price and quality. To this end, the program is developing ways to provide beneficiaries with comparative information.

Many elements of Medicare managed care are being debated as the Congress and the President consider Medicare reform. To inform this discussion, this chapter summarizes Medicare payment policies and reviews various matters of concern. It then presents new analyses by the Prospective Payment Assessment Commission (ProPAC) of plan and enrollee participation and the benefits that plans offer to Medicare beneficiaries. These are followed by a review of issues related to quality for beneficiaries in managed care plans. The chapter concludes by describing some of the challenges in and approaches to enrolling beneficiaries with special health care needs, such as those with disabilities or chronic illnesses.

MEDICARE'S MANAGED CARE PLANS

In April 1997, 5 million beneficiaries (13 percent of all Medicare beneficiaries) were enrolled in managed care plans (see Table 2-1). About 90 percent were signed up with risk contracting plans. These plans receive capitation payments (preset, per person monthly amounts) and bear full financial responsibility for providing the benefits in their Medicare contracts. Plans must finance any spending that exceeds capitation amounts.

Table 2-1. Medicare Managed Care Contracts and Enrollment, 1997

Contract Type	Contracts	Enrollment
Risk	276	4,505,593
Cost (Parts A & B)	36	194,596
HCPP	48	290,268
Total	360	4,990,457
Demonstrations		
Competitive pricing	—	—
EverCare	5	3,634
End-stage renal disease	3	—
Medicare Choices	6	2,330
PACE	10	2,700
Social HMO	9	43,037

Note: HCPP = health care prepayment plan. PACE = Program of All-inclusive Care for the Elderly. HMO = health maintenance organization.

SOURCE: Health Care Financing Administration, Office of Managed Care, and Office of Research and Demonstrations.

The remaining 10 percent of enrollees in Medicare managed care were in cost-contracting plans, which are not at full risk for enrollee health care use. These plans receive capitation payments, but submit a cost report at the end of each year. If plans' costs are higher than their payments, Medicare makes additional payments. If costs are lower, plans must return the balance to Medicare. There are two cost-contracting options for plans: They may choose to furnish all Medicare services or only those covered under Part B.[1] Plans opting to cover only Part B services are called health care prepayment plans.

Medicare also sponsors demonstration projects that test alternative delivery systems and payment methods that may be particularly suitable for certain groups of Medicare beneficiaries. Although these demonstrations enroll small numbers of beneficiaries, they are important opportunities to test new program features—including payment methods, benefits, and plans—that later may be incorporated into the main managed care program.

RISK CONTRACTING PROGRAM

Medicare's most popular managed care option is the risk contracting program. Both plan and beneficiary participation have grown rapidly over the last few years (see Table 2-2). This section provides information on payments, plan participation and benefits offered, and beneficiary enrollment.

Table 2-2. Medicare Risk Program Participation, 1990-1997

Year	Enrollees: Number (In Millions)	Enrollees: As a Percentage of Total Medicare Enrollment	Contracts
1990	1.3	3.7%	95
1991	1.4	4.0	85
1992	1.6	4.4	83
1993	1.8	5.0	90
1994	2.3	6.1	109
1995	3.1	8.2	154
1996	4.1	10.8[b]	189
1997[a]	4.5	11.7[b]	276

Note: Enrollment data are as of December each year; contract data are as of January each year.

[a] Data are as of April 1997.

[b] Based on projections of total Medicare enrollment.

SOURCE: Health Care Financing Administration, Office of the Actuary and Office of Managed Care.

Payment Issues

Capitation payments can provide plans both the flexibility to innovate and the incentive to become more cost efficient. For Medicare, the challenge posed by capitation is determining the appropriate payment amounts. Payments should cover the costs of appropriate care, recognizing geographic variation in costs and differences in enrollee health status. At the same time, payments need to be high enough to allow reasonable profit, thereby attracting plans to the program, yet low enough for Medicare to realize savings over what would have been spent had risk plan enrollees remained under fee-for-service.

Health maintenance organizations (HMOs) with Medicare risk contracts receive capitation amounts that are based on their enrollees' counties of residence, program eligibility status, and certain demographic characteristics. Medicare's base capitation rates equal 95 percent of projected average program payments for Medicare beneficiaries in the fee-for-service program (the adjusted average per capita cost or AAPCC) for each county in the United States. This amount is calculated separately for three categories of enrollees: aged, disabled, and those who are eligible for Medicare due to end-stage renal disease (ESRD).

This section reviews several concerns about Medicare's approach to setting payment rates.[2] Favorable risk selection and the need for better risk adjustment mechanisms are first discussed. A description of issues related to the link between fee-for-service spending patterns and risk plan capitation amounts follows.

Risk Selection and Risk Adjustment—Chief among the concerns about risk plan payment is that the payment rates do not reflect the better health status, on average, of the beneficiaries who enroll in risk plans. Payments are based on spending for beneficiaries in the fee-for-service option, adjusted to reflect the beneficiary's age, sex, Medicaid and institutionalization status, and employer-based insurance coverage. Although these characteristics are associated with differences in spending, they explain only about 1 percent of the variation in health spending across individuals. Because risk plan enrollees tend to be healthier and the risk adjusters used by Medicare do not capture these

differences, researchers estimate that the program is paying 5 percent to 7 percent more than it would if these enrollees were in fee-for-service Medicare.[3]

This concern would be alleviated if the health status of beneficiaries who choose risk plans becomes more similar to that of beneficiaries who stay in fee-for-service over time. As the share of beneficiaries in risk plans grows, almost all the healthiest beneficiaries might already be enrolled in risk plans. Growth in new enrollees would come, then, from the less healthy populations remaining in fee-for-service. Another reason to think favorable selection might moderate is that in the future, most beneficiaries will be more familiar with managed care, inasmuch as it is the dominant private sector health insurance arrangement. Greater familiarity may attract a more representative set to managed care than is now the case.

On the other hand, differences between fee-for-service and risk plan enrollees may persist even as the share of Medicare beneficiaries in risk plans grows. Evidence of more favorable selection in risk plans in areas with high enrollment rates suggests this is true.[4] If so, it may be that the sickest beneficiaries are staying in fee-for-service, and that plans are continuing to profit from enrolling the healthiest ones.

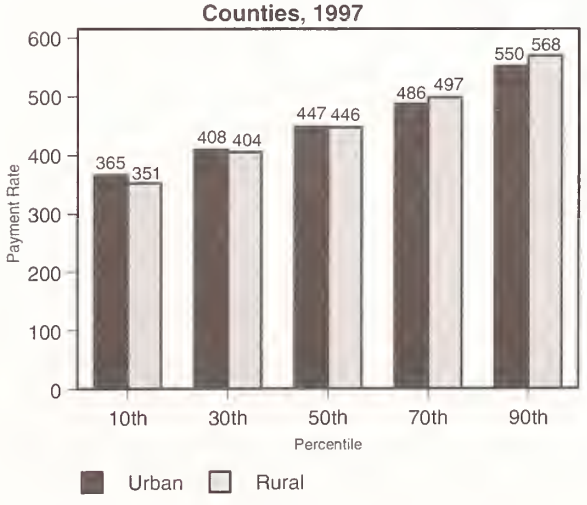
Since it is unknown whether healthier beneficiaries will persistently opt for risk plans, Medicare is exploring new ways to adjust its payment rates to reflect enrollee health status more closely. Improved risk adjustment to payment rates would keep Medicare from paying plans more than it intended. It would also mitigate any rewards for plans that enroll healthier beneficiaries. Even the best available methods, however, probably will be unlikely to correct for risk selection entirely. For this reason, some have suggested paying plans partly on the basis of their actual costs, a method known as partial capitation.[5]

Link Between Capitation Amounts and Fee-for-Service Spending—Another set of issues is the use of fee-for-service spending patterns to calculate Medicare risk capitation rates. This connection has led to highly variable and possibly biased rates.

Payment Rate Variation—Medicare's capitation rates vary widely within markets and across the country. The 1997 monthly payment rates for aged beneficiaries, for instance, range from $767 in Richmond County, New York, to $221 in Arthur County, Nebraska. The highest payment rates, generally found in urban areas, are believed to compensate plans much more than is needed to cover basic Medicare benefits. By contrast, the lowest rates, often for rural areas, may discourage HMOs from offering a risk plan. Other factors, including provider supply, also influence whether HMOs offer these plans, however.

To a certain extent, payment rate variation reflects differences in area input prices and practice patterns. When adjusted for local wage differences, rate variation is reduced somewhat, and urban and rural counties show a similar range of payment amounts (see Figure 2-1). Some remaining diversity probably reflects population health status and local practice patterns. These, in turn, are influenced by provider supply, training, and resources available for health care. Capitation amounts are also affected by Medicare's fee-for-service payment policies, which include special payment adjustments to teaching and disproportionate share hospitals. (See Chapter 3.) In counties with few beneficiaries, the capitation rates probably reflect to some degree random spending patterns.

Figure 2-1. Standardized Medicare Risk Plan Monthly Payment Rates for Aged Enrollees in Urban and Rural Counties, 1997



Note: Payments are standardized by adjusting 70 percent of the rate by the Medicare hospital wage index.

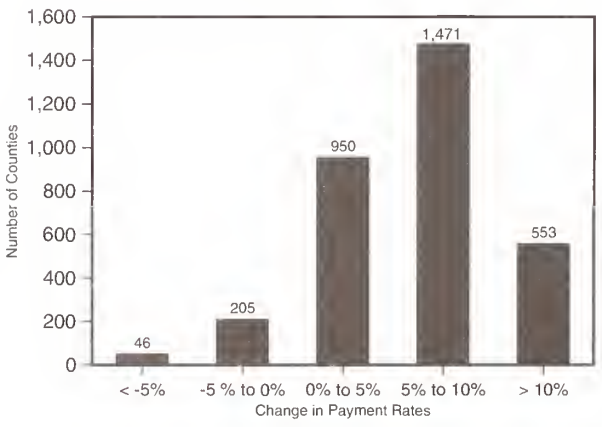
SOURCE: ProPAC analysis of data from the Health Care Financing Administration, Office of the Actuary.

The annual changes in county capitation payment rates also vary. Between 1996 and 1997, Medicare's estimate of its average spending per beneficiary changed by 5.8 percent. Payment increases exceeded 10 percent in 553 counties (see Figure 2-2). On the other hand, payment rates did not go up at all or were reduced in 251 counties. Counties that received lower rates in 1997 included Loving, Texas, with few beneficiaries, and New York City.

Biased Capitation Amounts—Another concern about linking risk plan capitation rates to fee-for-service spending is the potential for bias in the base capitation rates due to favorable selection. If the beneficiaries who choose risk plans are persistently healthier than those who do not, as discussed earlier, then as managed care enrollment rises so too will the average cost for fee-for-service beneficiaries.

Moreover, even if risk plans enroll costlier Medicare beneficiaries, over time fee-for-service spending estimates might still be biased. Studies have shown that a small share of Medicare beneficiaries (1 percent) account for a disproportionate amount of Medicare spending (14 percent). If these costly beneficiaries are the ones who stay in fee-for-service, their average costs will be extremely high. If capitation amounts continue to be linked to fee-for-service spending, plans would receive far more than needed to care for their Medicare enrollees.[6]

Figure 2-2. Distribution of Counties, by Change in Medicare Managed Care Monthly Payment Rates for Aged Enrollees, 1996-1997



SOURCE: ProPAC analysis of data from the Health Care Financing Administration, Office of the Actuary.

This problem accentuates the need for an improved risk adjustment method.

Alternatives to the Current Method—There are several approaches to severing the link between fee-for-service spending and risk plan payment amounts. One method that could be adopted in the short term is a rate-setting system that would use historical fee-for-service spending as a base and an update framework to increase rates annually. Several proposals have already been made to reduce payment rate variation, including blending county payment rates with national ones, applying different payment updates over time to bring payment rates closer together gradually, and broadening the geographic areas for which the rates are calculated. Eliminating the geographic differences in the payment rate updates could be accomplished by using national updates in all areas.

Other options are being explored for setting payment rates in the future. One draws on lessons from purchasers that have successfully employed a competitive pricing approach to determine payment amounts. Under this approach, plans would propose capitation amounts for covering Medicare beneficiaries. Medicare would use these bids to determine how much it will pay. Policy makers hope that competitive bidding will reduce payment rates below what Medicare otherwise would pay and cause plans to compete on the basis of quality.

The Health Care Financing Administration (HCFA) intends to conduct a demonstration of competitive pricing that is scheduled to start in January 1998 in Denver. Medicare will ask all plans in that market to bid on covering two benefit packages—a minimum one and one that reflects the average level of benefits offered in Denver in 1997. Whatever Medicare pays plans will be based on the bids, but whether that will be the average of all bids, the lowest bid, or some other amount is unknown. Plans that offer low bids may supplement their benefit packages up to Medicare's payment amount. Those with higher bids will have to charge higher premiums or cut back on benefits offered to make up the difference between their bid and Medicare's payment.[7]

As changes to the payment method are contemplated, there is concern that these reforms might discourage plan participation and beneficiary

enrollment in the risk program.[8] Historically, payment rates have influenced HMOs' decisions to offer a risk plan as well as the level of plan enrollment. In areas with the highest payment rates, plans have offered beneficiaries the richest benefit packages, prompting them to exchange the greater provider choice under fee-for-service for broader coverage at a lower price. The following sections describe some of the relationships between payment amounts, plan participation, extra benefits, and risk plan enrollment.

Plan Participation

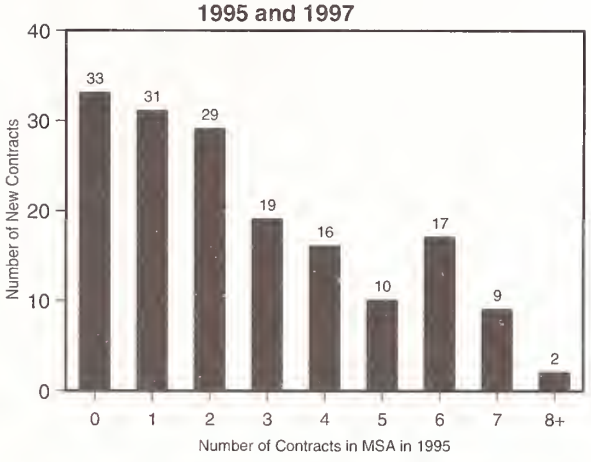
Adequate plan participation is essential to a successful risk contracting program. Beneficiaries who live in areas without participating HMOs obviously cannot choose the Medicare risk option. Ideally, markets should have several competing risk plans to allow beneficiaries choices and encourage plans to develop more attractive features.

Plan participation can be measured by counting the total number of Medicare risk contracts. There are more contracts than participating HMOs because some HMOs have more than one risk contract. In these cases, each contract has a distinct service area, receives a different set of payment rates, and may offer a different benefit package. Each contract therefore may be thought of as a separate risk plan.

Risk Plan Availability—Recently, the total number of risk plans has grown at an unprecedented rate. Between 1994 and 1997, this number more than doubled, rising to 276 in April 1997. This increase represents both new HMOs joining the program and new plans sponsored by those already participating in Medicare.[9] No plans dropped out during this period.

The growth in the number of plans has made Medicare managed care options more available, in some areas giving beneficiaries their first opportunity to enroll in a risk plan and in others allowing more plan choices. HMOs offered 33 new risk plans in areas that previously had none (see Figure 2-3). Consequently, between December 1995 and January 1997, plans became available for the first time in 38 metropolitan areas (some of the 33 new plans were offered in more than one area).[10] Most of these areas were smaller cities in New York, Ohio, Pennsylvania, and South Carolina, although four new risk plans started up in Atlanta during this period. Most new plans were offered in areas where at least one plan already existed, which gave beneficiaries more choices.

Figure 2-3. New Medicare Risk Contracts, by Prior Contract Availability, 1995 and 1997



Note: New Medicare risk contracts are those that were in operation in 1997 but not in 1995. Contracts may be counted more than once if they serve multiple metropolitan statistical areas (MSAs).

SOURCE: ProPAC analysis of data from the Health Care Financing Administration, Office of Managed Care.

Historically, HMOs have been quicker to offer risk plans in areas with relatively high payment rates. A ProPAC analysis compared the payment rates in areas historically served by risk plans with those in which plans have only recently become available. To determine whether a metropolitan statistical area (MSA) had above-average payment rates, an index of 1997 payment rates relative to the national average rate was constructed. Payment rates within each MSA were first adjusted for local wage differences and then averaged over all counties that made up the MSA. MSA rates were then divided by the national rate. ProPAC found that the average index value for MSAs seeing their first risk plans between the end of 1995 and early 1997 was 0.99, compared with 1.12 for areas having six or more plans in 1995. This observation suggests that relative payment amounts may be becoming less important to HMO participation in the Medicare risk contracting program.

Also between the end of 1995 and early 1997, many existing risk plans (55 out of 143 in 1995) enlarged their service areas. Most commonly, plans added one or two adjacent counties in the MSA they

Table 2-3. Medicare Risk Contract Expansions, by Number of Counties Added to Service Area, 1995-1997

Number of Contracts	Number of Counties Added to Service Area	Total Counties Added	Percentage of Counties Added in: MSA Already Being Served	New MSA	Rural Area
21	1	21	57%	19%	24%
14	2	28	54	29	18
12	3-9	67	30	33	37
8	10-49	192	14	42	44
Total					
55	1-49	308	24	37	39

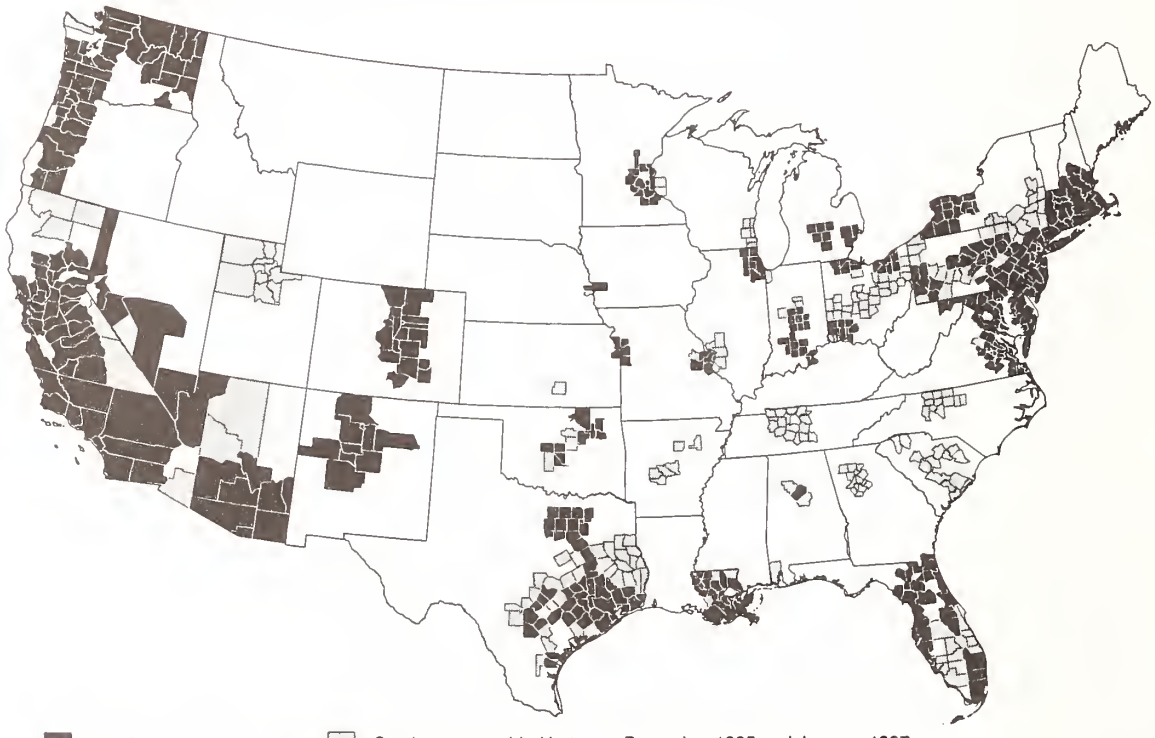
Note: Percentages may not sum to 100 due to rounding. MSA = metropolitan statistical area.

SOURCE: ProPAC analysis of data from the Health Care Financing Administration, Office of Managed Care.

were already serving (see Table 2-3). Some of the expansions, however, brought many new counties outside the MSA into plan service areas, often incorporating rural counties and other cities. These service area expansions gave many beneficiaries access to a risk plan for the first time. Of the 308 counties added to plan service areas, 124 had no risk plan in 1995.

The result of new entrants and contract expansions was a substantial increase in the number of counties served by risk plans (see Figure 2-4). In late 1995, risk plans were concentrated on the West Coast, in the Southwest, in Florida, along the East Coast, and in some cities in the Midwest. By early 1997, Medicare risk plans were available in more areas, including parts of New York, Ohio, Pennsylvania, and the Southeast.

Figure 2-4. Medicare Risk Plan Service Areas, 1995 and 1997



SOURCE: Health Care Financing Administration, Office of Managed Care.

Risk Plans in Rural Areas—Medicare beneficiaries in most rural areas do not have the option to enroll in a risk plan. Although some rural counties have no HMOs at all, more often rural counties are served by commercial HMOs but not by a Medicare risk plan. Of the 2,250 counties designated as rural (nonmetropolitan) by the Office of Management and Budget, only 11 percent have even one risk plan (see Table 2-4). By comparison, 58 percent of the 843 urban counties are in a risk plan service area.

The scarcity of risk plans in rural areas commonly is attributed to lower payment rates that deter HMOs from participating. ProPAC analysis found, however, that Medicare's payment rates in rural counties with risk plans are not much higher than those in counties without such plans. In 1997, the average monthly Medicare capitation rate for aged beneficiaries was $413 in rural counties with risk plans and $376 in counties with HMOs but no risk plans—a difference of 9.8 percent (see Table 2-5). When adjusted for differences in input prices, the difference falls to only 3.3 percent.

Medicare payment rates are only one difference between rural counties with and without risk plans. Other factors may be equally important. Provider supply is one. Counties without risk plans tend to have fewer hospitals and physicians than those that do, for instance. HMOs may opt not to participate in Medicare in counties with fewer providers because they may be less able to influence prices where there is less competition for patients.

Population size may also influence HMOs' decisions about whether to participate in Medicare.

Table 2-4. HMOs and Medicare Managed Care Plans, by County, 1997 (In Percent)

Availability in County	Counties	
	Urban	Rural
No HMO	1.2%	9.4%
Medicare risk plan	58.0	11.4
Medicare cost plan only	4.7	4.0
HMO but no risk plan		
HMO does not participate in risk program	13.9	41.3
HMO participates in risk program, excludes county	26.9	37.8

Note: Shares do not sum to 100 because counties served only by cost contracts also are counties where HMOs do not participate in the risk program. HMO = health maintenance organization.

SOURCE: ProPAC analysis of data from the Health Care Financing Administration, Office of Managed Care, and InterStudy, *The InterStudy Competitive Edge, Part 1: Industry Report 6.2* (Minneapolis: InterStudy, 1996).

Table 2-5. Characteristics of Rural Counties, by Presence of HMOs and Risk Contracts, 1997

Characteristic	No HMO	No Risk Contracts	Risk Contracts
Medicare payment			
Aged (Parts A & B)	$ 373	$ 376	$ 413
Aged (Parts A & B), standardized	459	454	469
County population	12,539	21,680	39,741
Population over 65	1,945	3,106	5,577
HMO enrollees	—	76	845
Number of hospitals	0.95	1.06	1.38
Physicians per 1,000	0.92	0.90	1.02
Share of population in HMOs	0%	0.4%	2.1%
Percentage of counties in group that are:			
Adjacent to an MSA	15%	42%	82%
Semi-urban[a]	48	65	84
Completely rural[b]	52	35	16
Farming dependent[c]	47	24	9
Government dependent[c]	6	10	17
Services dependent[c]	12	13	21
Retirement destinations[d]	1	8	20
Federal lands[e]	9	11	17
Commuting[f]	7	17	22
Persistent poverty[g]	6	27	16
Transfers dependent[h]	4	19	10

Note: HMO = health maintenance organization. MSA = metropolitan statistical area.

[a] Includes at least one population center of 2,500 or more.

[b] Has no population centers of 2,500 or more.

[c] Indicates economic specialization by shares of total labor and proprietor income from 1987 to 1989.

[d] The county population 60 years old and over in 1990 increased by 15 percent or more during 1980 to 1990 through in-migration.

[e] Thirty percent or more of a county's land area was federally owned in 1987.

[f] Forty percent or more of all the county's workers in 1990 commuted to jobs outside of their county of residence.

[g] Persons with poverty-level incomes in the preceding year were 20 percent or more of the total population in 1960, 1970, 1980, and 1990.

[h] Income from government transfer payments contributed a weighted annual average of 25 percent or more of total personal income from 1987 to 1989.

SOURCE: ProPAC analysis of data from the Health Care Financing Administration, Office of Managed Care; InterStudy, *The InterStudy Competitive Edge, Part 1: Industry Report 6.2* (Minneapolis: InterStudy, 1996); and the 1996 Area Resource File.

Rural counties without risk plans have a smaller population and fewer elderly people than those with these plans. HMOs may regard counties with smaller populations as less desirable places to offer a Medicare risk plan if there are too few beneficiaries to cover fixed costs.

In general, rural counties with Medicare risk plans are adjacent to an urban area and are more likely to have population centers of at least 2,500 people. That suggests it may be easier for plans serving the MSAs to expand to counties whose residents probably already go to the city for their medical care. Finally, the populations of rural counties with risk plans are less likely to be poor.[11]

These comparisons strongly suggest that while Medicare payment rates may play some role in attracting risk plans, economic factors like provider supply and population size and affluence are also important. Raising the payment rates in more remote rural areas might not have the desired effect of spurring HMOs or other entities to participate in Medicare, unless the market is attractive in other ways.

Enrollment Composition Rule and Plan Participation—Medicare has a number of qualification criteria for managed care contractors that may influence plan participation. Most of Medicare's requirements, such as those for financial solvency, quality assurance, and enrollee rights, are similar to those of other purchasers. Unique to Medicare, though, is the so-called 50/50 rule. This regulation stipulates that the combined enrollment of Medicare and Medicaid beneficiaries cannot exceed half of a contractor's total membership.[12] Intended as a quality control mechanism, the rule was based on the assumption that oversight by private purchasers (primarily employers) would keep an HMO's quality of care high.

The 50/50 rule has been criticized for possibly preventing HMOs with large shares of Medicaid enrollees from participating in Medicare. Further, the requirement could restrict potential Medicare enrollment growth. HMOs close to the 50 percent limit may not be able to recruit enough new commercial members to keep pace with the number of Medicare beneficiaries who would like to join. The number of Medicare and Medicaid managed care enrollees is growing rapidly after a relatively slow start, while commercial enrollment has leveled off.

Since 1995, HCFA has allowed managed care contractors to calculate their enrollment composition using several different approaches that make it easier to comply with the 50/50 rule.[13] The agency now permits them to include enrollment in their point-of-service (POS) plans and preferred provider organizations (PPOs) in addition to enrollment in traditional HMOs.[14] Medicaid enrollees can sometimes be removed from the count if they are in a statewide demonstration project or if the contractor receives a waiver from the Medicaid enrollment composition rule.

Although some HMO representatives claim that the 50/50 rule is a concern, most Medicare contractors are not close to the limit. This is true even when commercial enrollment is calculated including only traditional HMO business. ProPAC found that in January 1996, only 23 of the 197 HMOs with a Medicare contract had a Medicare and Medicaid share of 40 percent or higher. The HMOs closest to the limit tended to be the smallest ones, with a total enrollment of fewer than 20,000 for all lines of business (see Table 2-6). Medicare and Medicaid enrollees made up about 31 percent of total enrollment in these small HMOs' traditional products. One explanation may be that the smaller HMOs often have a relatively large share of Medicaid enrollees. Many of these small plans are able to benefit from the more liberal interpretation of the 50/50 rule, however, since they have a relatively high share of commercial enrollees in nontraditional managed care options.

Even though most current contractors easily comply with the 50/50 rule, some HMOs may not contract with Medicare because they cannot. Therefore, it is difficult to know the extent to which the rule actually inhibits plan participation. Further, decisions about eliminating the rule probably will depend more on the availability of quality evaluation systems to replace it. Proposals have been made to replace the rule with more direct quality measures like the Health Plan and Employer Data and Information Set (HEDIS). Another approach to quality assurance might entail having plans pass periodic performance reviews conducted by Medicare or others.

Types of Plans Available—Despite the growing numbers of risk plans and, consequently, the greater availability of this option, some believe that

Table 2-6. Selected Enrollment Ratios for HMOs With Medicare Contracts, 1996

HMO Enrollment Ratio	Total Number of HMO Enrollees				
	0 to 19,999	20,000 to 49,999	50,000 to 99,999	100,000 to 249,999	250,000 +
Federal to traditional	31%	23%	22%	16%	16%
Federal to total	23	20	18	13	10
Nontraditional commercial to traditional commercial	32	13	24	23	43
Medicaid to traditional commercial	17	13	12	5	8

Note: Federal enrollment is combined Medicare and Medicaid enrollment. Traditional HMO enrollment is for enrollees in closed network HMO products. Nontraditional enrollment is for enrollees in other managed care options, including preferred provider organizations and point-of-service options. Total enrollment combines traditional HMO enrollment with enrollment in other managed care options. HMO = health maintenance organization.

SOURCE: ProPAC analysis of the InterStudy Competitive Edge Database 6.2.

Medicare should permit a broader array of managed care organizations to sponsor a risk plan. Employers often offer PPOs and a variety of other delivery and financing arrangements, which have been popular among their employees. Medicare could emulate the successful experience in the private sector. Further, introducing different managed care options to Medicare might spur competition among all types of plans to develop innovative products that are attractive to beneficiaries.

POS Option—Many managed care plans have been offering a POS option to their non-Medicare enrollees. Unlike a traditional HMO, a plan with a POS option will pay for an enrollee's use of physicians and other providers not in its network. However, enrollees' out-of-pocket payments are generally higher if they choose non-network physicians. In 1996, HCFA clarified its position that a POS benefit option for Medicare was allowed under current law and regulation.

Availability of a less restrictive managed care choice, such as a POS option, may make risk plans more attractive to beneficiaries. Many Medicare beneficiaries are reluctant to join risk plans modeled after traditional HMOs because they do not want to lose either their current doctor or the freedom to choose their own physician.[15] The POS option should appeal to these beneficiaries and to those who travel and would like to get routine care while temporarily out of their plan's service area. (Risk plans already must cover emergency and urgently needed care from out-of-network providers.)

Risk plans offering a POS benefit may limit the covered services for which enrollees may seek out-of-network care. Plans may set annual dollar limits on the amounts paid for services furnished by out-of-network providers and may impose higher deductibles and coinsurance for out-of-network services than for in-network care. They may also require beneficiaries to receive approval for non-network services before using them. Additionally, plans must inform beneficiaries of cost-sharing rules, maximum benefits, financial risks, and service coverage rules.

As of January 1997, HCFA had given 24 HMOs approval to offer a POS option in 34 risk plans in 13 states, primarily on the East Coast. Fewer than 500,000 risk plan enrollees (12 percent of the total) were enrolled in plans that offered this option.[16]

Medicare Choices—To test the feasibility and attractiveness of alternatives to HMOs in the risk contracting program, HCFA in 1995 launched the Medicare Choices demonstration. Medicare Choices also will investigate risk adjustment methods, quality monitoring systems that rely on encounter data, and alternative requirements for managed care organizations offering risk plans. As of March 1997, there were demonstration sites in Columbus, Orlando, Philadelphia, and four counties in Montana. Among the participants are provider-sponsored networks, provider-owned HMOs, provider/HMO joint ventures, and PPOs. Enrollment is just beginning at these sites.

Benefit Packages

As part of its agreement with the Medicare program, each risk plan must annually submit a so-called adjusted community rate proposal. In this proposal, the plan calculates its projected costs of providing Medicare-covered services to risk plan enrollees. The projections are based on costs for the HMO's commercial enrollees, adjusted for the higher expected use rates of Medicare enrollees. A plan includes in these calculations its administration and profit requirements, which are also based on the HMO's commercial experience.

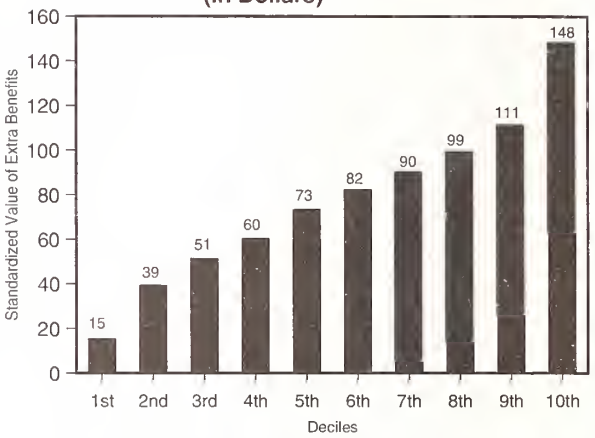
The plan's projected costs are then reduced to account for estimated Medicare fee-for-service copayments and deductibles.[17] This adjusted amount is compared with the plan's expected payment from the Medicare program. Plans may not keep any projected savings (that is, expected program payments in excess of adjusted projected costs), but must return them to Medicare, credit them to future years, or use them to provide additional benefits.

To attract beneficiaries, virtually all plans that have savings use them to finance additional benefits, such as non-Medicare-covered services, use of out-of-network providers, or lower cost-sharing requirements. In addition, almost every risk plan waives at least part of the premium it is otherwise permitted to charge the enrollee.[18] In fact, in 1996, over half of all risk plans waived their entire premium. The value of benefits funded by savings, together with the amount of waived premium, represents the financial value of extra benefits beyond Medicare's fee-for-service package.

The financial value of these extra benefits can be substantial, but varies across plans (see Figure 2-5). To analyze the differences, ProPAC first accounted for variation in local wages and then ranked plans by the amounts of extra benefits. In 1996, there was a 10-fold difference between the top 10 percent of risk plans ($148) and the bottom 10 percent ($15). The average risk plan offered $79 in extra benefits per enrollee per month. The average risk plan enrollee however, had $96 in extra benefits each month, suggesting that more beneficiaries decide to enroll in risk plans that offer richer benefit packages.

Risk plans are also offering more extra benefits over time. The average risk plan operating in 1994 offered $43 in extra benefits; by 1996, that amount almost doubled to $83 for those plans. The growth in extra benefits has been driven primarily by plan savings, indicating that the gap between expected Medicare payments and plans' projected costs is widening.

Figure 2-5. Standardized Value of Extra Benefits Offered by Risk Plans, by Plan-Level Deciles, 1996 (In Dollars)



Note: Extra benefits are the sum of any savings and the amount of waived premium, standardized by the Medicare hospital wage index for the risk plan's service area. They are expressed as per member per month values. The decile averages are for 10 equal-sized groups of plans, ranked by the value of extra benefits.

SOURCE: ProPAC analysis of adjusted community rate proposal data from the Health Care Financing Administration, Office of Managed Care.

Risk plans' extra benefits are influenced by both the payments they anticipate receiving and their projected costs of covering the Medicare benefit package. On average, plans with the most generous packages served areas having above-average payment rates. They also expected to incur below-average costs in providing Medicare benefits (see Table 2-7).[19] For example, plans that offered the richest packages served counties where payment rates were 17 percent above average, and they projected costs that were 7 percent below average. By contrast, plans offering the fewest extra benefits anticipated payment rates 13 percent below average and projected costs 3 percent above average.

The strong association between extra benefits and payment rates is demonstrated more explicitly by ranking plans according to the rates they receive (see Table 2-8). Plans with above-average rates tended to provide more extra benefits, even though they projected above-average costs. Conversely,

Table 2-7. Characteristics of Medicare Risk Plans, Ranked by Value of Extra Benefits, 1996

Decile	Average Standardized Extra Benefits	Average Plan Payment Index	Average Cost Index
All	$ 77	1.00	1.00
10 (highest)	148	1.17	0.93
9	111	1.06	0.96
8	99	1.03	0.99
7	90	1.03	0.96
6	82	1.02	1.01
5	73	1.06	1.09
4	60	0.92	1.04
3	51	0.92	1.02
2	39	0.91	0.97
1 (lowest)	15	0.87	1.03

Note: Extra benefits are the sum of any savings and the amount of waived premium, standardized by the Medicare hospital wage index for the risk plan's service area. They are expressed as per member per month values. The decile averages are for 10 equal-sized groups of plans, ranked by the value of extra benefits.

SOURCE: ProPAC analysis of adjusted community rate proposal data from the Health Care Financing Administration, Office of Managed Care.

Table 2-8. Characteristics of Medicare Risk Plans, Ranked by Risk Plan Payment Index, 1996

Decile	Average Plan Payment Index	Average Standardized Extra Benefits	Average Cost Index
All	1.00	$ 77	1.00
10 (highest)	1.29	121	1.07
9	1.15	86	1.08
8	1.09	80	1.04
7	1.06	86	1.05
6	1.03	92	0.94
5	0.99	78	0.99
4	0.94	68	1.02
3	0.88	57	0.99
2	0.82	53	0.90
1 (lowest)	0.75	48	0.91

Note: Extra benefits are the sum of any savings and the amount of waived premium, standardized by the Medicare hospital wage index for the risk plan's service area. They are expressed as per member per month values. The decile averages are for 10 equal-sized groups of plans, ranked by the plan payment index.

SOURCE: ProPAC analysis of adjusted community rate proposal data from the Health Care Financing Administration, Office of Managed Care.

plans in areas with lower payment rates provided relatively fewer extra benefits, despite projecting below-average costs.[20]

While payment rates and costs directly affect the level of extra benefits plans offer, other factors also play a role. A recent ProPAC analysis found that the number of competitors in an area, as well as characteristics of the sponsoring HMO (like overall enrollment and model type), can influence what plans provide. This finding suggests that local conditions may influence the relationship between payment rates and extra benefits.

Enrollment and Disenrollment

Most beneficiaries with both Part A and Part B coverage are allowed to choose a risk plan.[21] They may join when they first become eligible for Medicare or sometime later on, during the plan's open enrollment period. Risk plans must provide an annual open enrollment period for at least 30 consecutive days, though the timing is up to them. Many plans go beyond this requirement by allowing beneficiaries to enroll year-round. Plans must enroll all eligible beneficiaries on a first-come, first-served basis until they have reached their enrollment capacity.

Beneficiaries can disenroll from a risk plan at any time and for any reason, and can re-enroll later. To disenroll, the beneficiary submits a written request to the plan. The plan then notifies Medicare. The disenrollment is generally effective the month after the request is made. Plans may initiate disenrollment only in limited circumstances, for example, if the beneficiary moves out of the service area or fails to pay premiums.

Enrollment Trends—As noted above, enrollment in risk plans is growing rapidly, rising to 4.5 million (or about 12 percent of all Medicare beneficiaries) as of April 1997, from 1.3 million in 1990. Most of this growth has occurred in urban areas. Although enrollment in rural areas has risen sharply over the last few years, as of 1996 only about 2 percent of all enrollees in risk plans were from these areas, although 26 percent of all Medicare beneficiaries lived there. Only about 1 percent of all rural beneficiaries were enrolled in risk plans.

Enrollment in the risk program initially was concentrated on the West Coast and in Florida. Much of the growth in risk plan enrollment since then, however, has occurred in other areas. The MSAs where enrollment grew most between November 1995 and February 1997 include Philadelphia, Pittsburgh, and Boston (see Table 2-9). Urban areas showing the greatest surge in new enrollment tend to be those where Medicare payment rates are relatively high. Enrollment growth probably reflects, at least in part, plans' ability to offer extra benefits, since higher payment rates are associated with richer benefit packages.

Competition among plans may stimulate enrollment growth, but the newer entrants do not necessarily attract the most new enrollees. New competitors had entered all of the markets where growth in enrollment was highest during the period cited above. In cities like Los Angeles, established plans grew the most. By contrast, in Pittsburgh, new plans accounted for 87 percent of enrollment growth.

Risk enrollees' enrollment histories reflect rapid rises in the risk plan enrollment rate. Almost 40 percent of all risk enrollees in 1997 had been in their plans for less than a year. Only about a fifth had been in a plan for more than four years. The majority are in risk plans for the first time. About 83 percent of all risk plan enrollees in 1997 had been in only one plan. Only about 5 percent had been in three or more plans.

One might expect to see a higher proportion of newly eligible Medicare beneficiaries choosing risk plans. That is because of the widely held notion that they were exposed to managed care plans before they retired and might want to continue their relationships with doctors and plans. Contrary to this expectation, though, ProPAC found that newly eligible Medicare beneficiaries have been enrolling in risk plans at about the same rate as the Medicare population in general. Most of the growth in enrollment, then, has not been from newly eligible beneficiaries but from others (see Figure 2-6). In 1992, 27 percent of first-time risk enrollees joined these plans within three months of becoming eligible for Medicare. Even though, over the last five years, more beneficiaries have joined risk plans soon after they became eligible for Medicare, they now account for a smaller share of new risk enrollees (17 percent) than they did in 1992.

Although they may disenroll at any time, beneficiaries in risk plans are not especially inclined to switch to fee-for-service. Those who leave a risk plan are likely to choose another one within three months. To understand disenrollment patterns, ProPAC followed the group of beneficiaries who enrolled in risk plans for the first time in 1995 for a

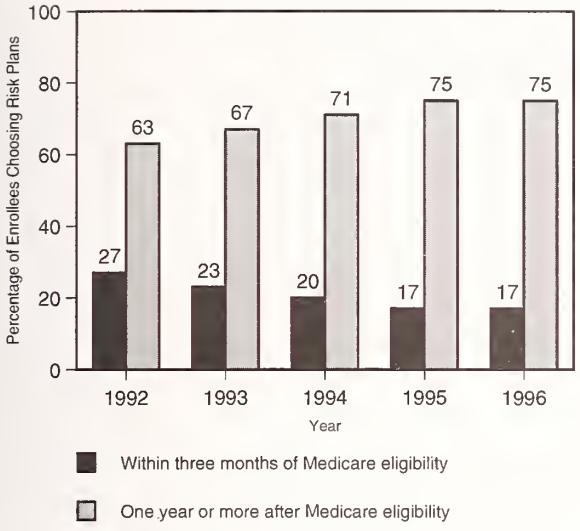
Table 2-9. Urban Areas With the Most Growth in Risk Contract Enrollees, 1995-1997

Urban Area	Share of National Growth	1996 Enrollment Rate	Enrollment Growth in: Old Contracts	Enrollment Growth in: New Contracts	Number of Contracts in: 1995	Number of Contracts in: 1997	Increase in Contracts	1997 Payment Index
Philadelphia	5.7%	24%	89%	11%	6	11	5	1.21
Pittsburgh	5.1	19	13	87	1	3	2	1.28
Boston	4.6	15	69	31	7	10	3	1.06
New York	4.3	12	92	8	5	10	5	1.19
Tampa	3.4	27	39	61	4	8	4	1.17
Los Angeles	2.9	35	99	1	13	15	2	1.18
St. Louis	2.6	12	40	60	2	4	2	1.13
Phoenix	2.3	38	97	3	6	8	2	1.09
Oakland	2.1	35	88	12	7	11	4	0.95
Nassau-Suffolk	2.1	17	97	3	6	10	4	1.02
Average	—	23	69	31	5.7	9	3.3	1.13

Note: Old risk contracts were offered in December 1995; new risk contracts started between December 1995 and January 1997. Growth is measured as the difference in risk enrollees between 1995 and 1997. The payment index is constructed by standardizing payment rates for each county using the hospital wage index and averaging them for the metropolitan statistical area (MSA), weighting by the number of Medicare beneficiaries. MSA payment is then divided by the national average payment rate.

SOURCE: ProPAC analysis of data from the Health Care Financing Administration, Office of Managed Care.

Figure 2-6. Length of Time Between Medicare Eligibility and Initial Risk Plan Enrollment, 1992-1996



Note: Data exclude beneficiaries who enrolled within three to 12 months of eligibility.

SOURCE: ProPAC analysis of data from the Health Care Financing Administration, Office of Managed Care.

year. Those who disenrolled because of death or loss of eligibility were dropped from this analysis. At the end of the year, about 13 percent disenrolled. About 56 percent of this group joined another risk plan within three months.

Proposed Changes to Enrollment and Disenrollment Policies—Changes in Medicare's enrollment and disenrollment policies are being considered. Although these changes are aimed primarily at fostering enrollment, they might also increase the share of less healthy beneficiaries found in risk plans, thereby moderating favorable selection in these plans.

To spur enrollment and improve beneficiaries' understanding of Medicare managed care options, a uniform annual open enrollment period has been proposed. During this period, all plans would be available for new enrollment at the same designated time. HCFA could disseminate comparative information about available plans and generate beneficiary interest in managed care options at this time. In addition, the introduction of a third party to the enrollment process, such as an enrollment broker, has been considered. This broker would provide beneficiaries with information about risk plans and would process enrollments and disenrollments.

HCFA proposes to evaluate the broker function as part of its competitive pricing demonstration in Denver. This option is being tested to see whether it provides beneficiaries with more impartial data about risk plans than they now receive in plan marketing materials, which are their current source of information.[22] An enrollment broker might also reduce favorable risk selection to plans. Risk plans may have been using their marketing and information strategies to attract healthier beneficiaries. With more balanced information from an enrollment broker, though, less healthy beneficiaries might decide to join these plans.

Although beneficiaries can easily disenroll from a risk plan, the lack of availability and costliness of Medicare supplemental insurance, also known as medigap, may limit their ability to do so. Medigap policies without preexisting condition exclusions must be offered to all beneficiaries when they first become eligible for Medicare. For beneficiaries who enroll later, however, these exclusions are usually imposed.

Beneficiaries generally drop their medigap coverage when they join risk plans because plan benefit packages duplicate and usually exceed those included under medigap policies. Beneficiaries deciding to switch from a risk plan to fee-for-service Medicare may find it difficult to locate a medigap plan that meets their needs. For this reason, some have proposed changes in the laws that regulate medigap policies to allow beneficiaries who disenroll from risk plans to resume such coverage under more favorable terms than is now the case.

Others oppose having an open enrollment requirement for medigap plans because they believe that doing so would make sick beneficiaries in risk plans likelier to switch to fee-for-service Medicare. Favorable selection to risk plans would increase as a result. Another potential impact is a rise in medigap premiums resulting from higher spending for sicker beneficiaries holding medigap policies.

Finally, Medicare's disenrollment policy could be changed to more closely parallel the approach used by employers. They permit shifting between health plans only at certain times of the year, unless the switch is due to a move, a change in family circumstances, or other specific reasons. If Medicare adopted a stricter policy, risk plans

would have a more stable enrolled population year-round. Enrollees would remain in their plans when they otherwise might have chosen another plan or the fee-for-service option. That could financially benefit the fee-for-service program, since risk plan disenrollees tend to use more services than average beneficiaries in fee-for-service.[23] At the same time, however, beneficiaries considering joining a risk plan for the first time might be deterred from doing so by the limited opportunities to drop out. Some provision could be made to give first-time enrollees an early disenrollment option.

QUALITY AND MEDICARE MANAGED CARE

Quality assurance under managed care is currently the subject of much attention. A prevailing concern is that managed care plans have responded to the financial incentives under capitation not only by restraining the use of unnecessary services, but also by denying access to needed care or referrals. Over the past year, legislative and regulatory action has been taken on both the state and Federal levels to protect managed care enrollees. While increased oversight may prevent plans from placing certain inappropriate constraints on coverage or choice, it does not help consumers assess the quality of care delivered by a particular plan or provider.

Quality assessment requires specific information on the attributes and results of care delivered. The demand for quality measures is increasing not only because regulators are seeking to monitor quality, but also because consumers and purchasers need to evaluate and choose among a growing number of options. Moreover, as competition escalates, quality measurement allows plans and providers to distinguish themselves and to demonstrate the benefits of their services. Discussion has focused on promoting value-based competition and comparison, which encompasses both quality and cost.

While the goal of quality assurance is widely shared, it is difficult to develop a comprehensive approach that reflects the priorities of the Medicare program, risk contractors, providers, and beneficiaries. One approach focuses on enforcement of quality standards defined by the program and close monitoring of plans. Another emphasizes the role of informed consumers, who are increasingly vigilant about their health care. This approach would have Medicare provide information that beneficiaries can use to evaluate quality when considering their enrollment options. Such information could include measures of plan performance, clinical quality, and beneficiaries' opinions, each of which illustrates a particular dimension of quality.

Protection of Quality and Access

Medicare sets minimum quality standards through its terms for risk and cost contracts. Conditions of participation and appeals and grievance processes are designed to address plan behavior that may jeopardize enrollees' access to care. Enrollment rules also protect beneficiaries, since they can disenroll from a Medicare risk plan at any time if they perceive quality or access problems.

Recently, HCFA has stepped up its oversight of plans. Beginning in 1997, Medicare and Medicaid risk and cost contractors are required to disclose information about compensation arrangements with physicians that involve financial incentives to limit referrals to specialists.[24] Under the so-called physician incentive plan rule, participating HMOs must provide specified information about the type of arrangement and the percentage of income at risk to HCFA and to beneficiaries if they request it. Smaller HMOs whose physicians bear substantial financial risk for referrals must also ensure that their physicians have stop-loss insurance.[25] This insurance partially protects physicians from unexpectedly high expenses for specialist referrals.

HCFA has also issued to participating HMOs policy instruction letters that emphasize compliance with the conditions of participation. For example, Medicare risk and cost plans cannot have "gag rules" that restrict physicians from counseling patients on all appropriate options for medically necessary treatment.[26] Plans also must consider individual circumstances before limiting hospital length of stay or requiring an outpatient procedure for beneficiaries who need surgery for breast cancer.[27] HCFA is investigating other problems, such as inappropriate denial of emergency room coverage, and is revising some of Medicare's appeals and grievance rules.

Measures for Comparing Quality

Rather than focusing on financial incentives and the behavior of all managed care plans, quality measurement discerns and quantifies differences among plans and providers. Beneficiaries can use the information generated by these measures to compare their options. Such data can also give providers feedback on their performance, so that they can identify specific weaknesses, track improvement, or check themselves against their peers. This section considers three dimensions of quality: plan performance and structure; clinical quality, which includes assessment of technical skill and the results of care; and beneficiary satisfaction and perceptions of quality.

Plan Performance—Plan performance generally is associated with access and utilization criteria such as the availability of providers, physician credentials, benefit design, and disenrollment rates. Many of these indicators are included in the National Committee for Quality Assurance's HEDIS, version 3.0. This year, for the first time, Medicare risk and cost contractors will be required to report to HCFA on a subset of these measures. They will summarize results for their Medicare enrollees at the contract or market area level, and will list all beneficiaries who use selected services (see Table 2-10).

Clinical Quality—Clinical quality concerns the technical aspect of patient-doctor interactions, as well as surgical and medical interventions. The criteria for assessing clinical quality are the appropriateness and timeliness of the service provided, how skillfully the service is performed, and what health status changes are associated with the service. It is difficult, however, to translate these concepts into specific measures. Although many have been developed, the current state of the art remains limited, making it difficult to infer quality levels.

Both the processes and outcomes of care are relevant to clinical quality. A process measure records the provision of a specific service to those who are expected to benefit from it. The service to be measured is chosen based on agreed-upon best practices and guidelines or, less frequently, by randomized clinical trials. Plans are required to report on four Medicare-relevant process measures in HEDIS 3.0.[28] Process measures, however, usually consider only a narrow portion of a patient's whole regimen of care.

An outcomes measure gauges the efficacy of treatment by tracking changes in health, functional status, test results, or behavior. One of HCFA's reporting requirements under HEDIS is an outcomes measure called the Health of Seniors. This measure, which uses a standard survey that asks 36 questions about activity limitations and personal health, will be administered to a cohort of beneficiaries at two-year intervals.[29] Current outcomes measures are difficult to interpret, however, because of the limitations in controlling for differences in case mix, severity of illness, and comorbidities. Hospital mortality statistics have been questioned for these reasons, and consequently HCFA has stopped publishing them. Moreover, many current outcomes measures are based on self-reporting by the patient,

Table 2-10. Selected Measures of Plan Performance

HEDIS Reporting Level	Measure
Contract or market area only	• Percentage of primary care physicians who completed residency/fellowship training, are board-certified, or both • Percentage of Medicare beneficiaries who had an ambulatory care visit • Percentage of mental health providers who served Medicare beneficiaries • Percentage of physicians affiliated with the health plan during the prior year, but not the current one
Contract or market area and beneficiary	• Number of selected procedures per 1,000 Medicare beneficiaries, plus identification numbers of beneficiaries* • Percentage of Medicare beneficiaries receiving chemical dependency services, plus identification numbers of beneficiaries

* Selected procedures are hysterectomy, cholecystectomy, angioplasty, coronary artery bypass graft, prostatectomy, reduction of fracture of femur, total hip replacement, total knee replacement, partial excision of large intestine, and carotid endarterectomy.

SOURCE: Health Plan and Employer Data Information Set (HEDIS), Version 3.0.

which may be less reliable than data from medical records.

Measures of clinical quality for the care of patients with specific conditions are more limited in scope. However, they may permit quality of care to be assessed with greater accuracy. The Foundation for Accountability, with input from HCFA, has developed quality measures for depression, breast cancer, diabetes, and asthma that adjust for certain patient characteristics. Data are collected through various methods, including self-reporting by patients, administrative claims, medical records, and registries. The Medicare Managed Care Quality Improvement Project—the Peer Review Organizations' initiative for beneficiaries with diabetes—currently has 23 participating HMOs and uses similar methods and measures of both outcomes and process (see Table 2-11).

Beneficiary Perceptions of Quality—Beneficiaries' views on the care they receive also are relevant indicators of quality. These measures require input from enrollees, rather than provider or plan reporting. One concern is patients' satisfaction with the technical aspects of care. Subjective experiences, such as whether providers met individual expectations and preferences, are also relevant.[30]

Surveys are generally used to measure this dimension of quality, by asking individuals about their experiences with their plan or physician (see Table 2-12). Surveys can elicit overall opinions on the care provided by a plan or target the experience of patients who have gotten extensive care, such as those receiving specific kinds of treatment. Starting in 1997, all Medicare risk and cost contractors will participate in a beneficiary satisfaction survey developed for the Agency for Health Care Policy and Research, called the Consumer Assessments of Health Plans Study's Medicare HMO Survey. HCFA intends to provide beneficiaries with summary information, based on the survey and HEDIS, in charts that compare plans.

Table 2-11. Selected Measures of Clinical Quality for Diabetes Mellitus Care

Measure	
Process	Outcomes
Foot examination	Functional limitations
Eye examination	Glycosylated hemoglobin levels
Diet education	Blood lipid levels
Anti-smoking advice	Rates at which smokers quit

SOURCE: Foundation for Accountability and the Medicare Managed Care Quality Improvement Project.

Other Quality Issues

One barrier to measurement of clinical quality is that patient-level data are costly to collect. Moreover, measures need to be continually refined to reflect the latest advances in medical practices and quality measurement. Many observers look to developments in information systems and computer technology to make encounter data from medical records more accessible.

It is unclear whether current quality-related efforts are sufficient to ensure that managed care enrollees are receiving the best possible care. Consumer protection initiatives have a limited influence on plan and provider behavior, since they address only specific problems that have been identified. In addition, there is no clear link between discrete measures of clinical quality and providers' ability to assess or improve their overall performance. Further, it is difficult to determine what types of quality-related information would be valuable for consumers, what formats would be effective, and how beneficiaries would respond to more comprehensive information on plans. Some beneficiaries may find the volume of information more confusing than helpful.

Quality assurance may ultimately require an integrated approach that includes data collection to measure performance, enforcement of certain standards, and information dissemination to beneficiaries. As long as financial pressure grows, however, quality concerns will intensify, particularly as the managed care population becomes more diverse and includes more vulnerable groups, such as the mentally and chronically ill.

SPECIAL MEDICARE POPULATIONS AND MANAGED CARE

Beneficiaries who are disabled, frail, or have chronic conditions pose a number of challenges for managed care under Medicare. On the one hand, centralized coordination of services by a managed care plan could improve the care these beneficiaries receive, while lowering costs. Such beneficiaries need acute, psychosocial, and palliative care over a

Table 2-12. Selected Measures of Beneficiary Perceptions of Quality of Care

Source	Measure
CAHPS	• How often you were able to get an appointment as soon as you wanted • How hard it was for you to get needed medical help in the evenings and weekends • How often you were able to see a specialist if you needed one • How often physicians or health care professionals listened carefully to you • What overall rating you would give your Medicare health maintenance organization • Whether your personal physician knows about decisions made by other health care professionals about your care
FAcct	• Satisfaction with the timeliness of test results • Satisfaction with attention to psychological needs • Satisfaction with access to needed services and specialists • Satisfaction with treatment decision making

Note: CAHPS = Consumer Assessments of Health Plans Study. FAcct = Foundation for Accountability.

longer time and often depend on numerous caregivers in a variety of settings. Capitation gives plans financial incentives and flexibility to keep the enrollee as healthy and functional as possible.

On the other hand, disabled or chronically ill beneficiaries face certain barriers to enrollment. Managed care options may not be suited to those who have established relationships with providers and might not want to limit their choices. Such plans may not have all the needed specialists or may use primary care physicians who lack experience with beneficiaries' conditions. Moreover, some plans may structure delivery systems in a way that is unattractive to this population. They may also target marketing materials to those who respond to a "healthy" message, so as to discourage enrollment of those who are disabled or frail.[31] In fact, chronically ill beneficiaries enrolled in HMOs have reported problems with access to services and specialists.[32]

In addition, because of the lack of adequate risk adjustment to the Medicare capitation payment rate, Medicare risk plans may not be interested in adding members who are disabled or chronically ill. If payments accurately reflected the cost of care for these groups, plans would have less incentive to avoid them. Unfortunately, robust risk adjusters are not immediately available. In addition, although risk adjustment models have been developed for disabled Medicaid recipients, they may not be appropriate for the Medicare disabled, in light of differences between the two populations.[33]

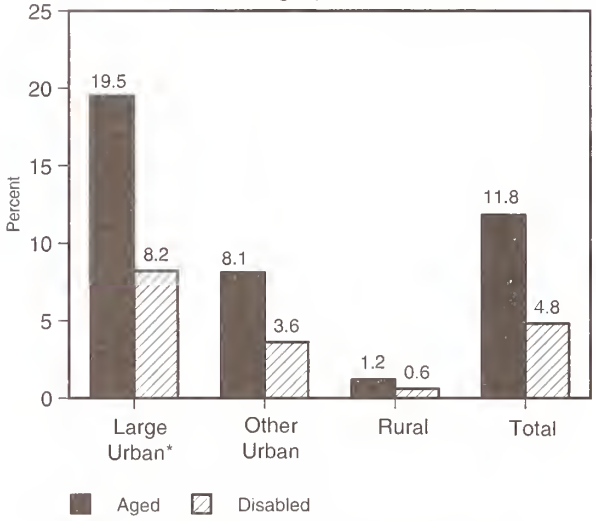
The first part of this section looks at these issues as they apply specifically to the participation of disabled beneficiaries in the risk contracting program. In addition to risk contracts, however, Medicare's managed care program includes demonstration projects that test innovative programs for nursing facility residents, beneficiaries with ESRD, and other populations with substantial health care needs. Also relevant are state initiatives related to managed care for disabled Medicaid recipients and Medicare beneficiaries who receive assistance from Medicaid (called dual eligibles).

Medicare Disabled Population and the Risk Contracting Program

Disabled beneficiaries have the lowest Medicare managed care enrollment rates of all age groups, 4.8 percent in 1996, compared with 11.8 percent for aged beneficiaries.[34] A ProPAC analysis found that enrollment rates for the aged and the disabled vary geographically in similar ways (see Figure 2-7). For example, 8.2 percent of disabled beneficiaries in large urban areas (those with a population of one million or more) were enrolled in risk plans, the highest rate for any area. Still, this figure represents less than half the 19.5 percent enrollment rate for aged beneficiaries in these areas.

Beneficiary characteristics and Medicare payment methods both may contribute to lower enrollment rates for the disabled. This group (12 percent of the Medicare population in 1995) consists primarily of recipients of Social Security Disability Insurance (SSDI), who must be totally unable to work due to a disability.[35] Because of their illnesses, these beneficiaries may have longstanding relationships with specialists and other providers. They

Figure 2-7. Medicare Risk Plan Enrollment as a Percentage of Total Enrollment for Aged and Disabled Beneficiaries, by Type of Geographic Area, 1996



* Metropolitan statistical areas with a million or more people.

SOURCE: ProPAC analysis of data from the Health Care Financing Administration, Office of Managed Care.

thus may be unwilling to choose a risk plan if they cannot continue to see those providers.

The Medicare disabled may also be underrepresented in managed care because many are mentally impaired. This condition is now the single most common reason for new SSDI eligibility, accounting for over one-quarter of all new beneficiaries in this category.[36] In 1994, 29 percent of all beneficiaries on the SSDI rolls had mental impairments, up from 22 percent in 1986.[37] These beneficiaries pose special challenges for the health care system overall. They are more likely to report unmet health needs and use of a clinic or hospital rather than a doctor's office as the usual source of care. Additionally, they are less satisfied with the care received, especially the thoroughness of their treatment.[38] These conditions may be especially problematic for risk plans, because HMOs generally have been less successful at providing mental health care.[39]

Dual eligibility may further contribute to low enrollment of the disabled in risk plans. Of the Medicare-disabled population, 41 percent also are eligible for Medicaid, compared with 13 percent of aged Medicare beneficiaries.[40] Dual eligibility poses potential problems for risk plan enrollment, inasmuch as Medicaid agencies and plans may have difficulty coordinating benefits and payments. Further, since they already have comprehensive benefit coverage and no out-of-pocket spending requirements, dual eligibles have little incentive to join risk plans.

Medicare payment policies also may deter risk plans from seeking out the disabled. Risk plan payment rates are based on fee-for-service expenditures for disabled beneficiaries in each county. In many counties, the rates are based on limited data because of the small number of disabled beneficiaries. Consequently, risk plan payment rates for these beneficiaries may be too low (or high) and volatile from year to year.

Finally, lower rates of risk plan enrollment among the disabled may reflect a slower transition period to managed care. Over time, as risk plans become more widely available and beneficiaries grow more familiar with managed care, the difference in the enrollment rates may decline. In addition, many disabled beneficiaries are poor, and enrolling in risk plans may hold particular appeal because of low out-of-pocket spending requirements. In fact, the number of nonelderly disabled risk plan enrollees grew by 22.7 percent annually between 1989 and 1994 (see Table 2-13).

The growth in enrollment among the disabled poses new medical and administrative challenges to risk plans, which may be more accustomed to meeting the needs of aged Medicare enrollees. Further, as the disabled population grows, Medicare

Table 2-13. Risk Plan Enrollment, by Age, 1989 and 1994 (In Percent)

Age	Enrollment Rate		Annual Increase in Number Enrolled
	1989	1994	
All	3.3%	6.2%	15.4%
Under 65	1.2	2.6	22.7
65-69	3.7	7.2	13.7
70-74	4.0	7.3	15.6
75-79	3.7	6.8	14.4
80-84	3.2	6.1	16.9
Over 84	2.4	4.8	18.2

SOURCE: W. Pete Welch, "Growth in HMO Share of the Medicare Market, 1989-1994," *Health Affairs* 15(3): 201-14, Fall 1996; and unpublished data provided by the author.

may need to reevaluate its payment method and investigate special risk adjustment methods.

Medicare Demonstrations for Special Populations

Three of Medicare's managed care demonstration projects focus on aged beneficiaries who need long-term care, while one is for beneficiaries with ESRD (see Table 2-14). These programs adapt certain managed care tools used by mainstream risk plans, such as case management and provider networks. They all have payment systems that give plans financial incentives to care for beneficiaries who are expected to use services regularly. Several furnish long-term care services (such as custodial nursing facility care or homemaker services) that are not generally covered by Medicare and that are not usually included in risk plan benefit packages. These demonstration projects test whether efficiencies and better outcomes can be achieved by integrating delivery, payment, or both, for acute and long-term care. In total, the four demonstrations described below have nearly 50,000 members spread across at least 27 sites and 22 cities, and are continuing to expand (see Table 2-1).

EverCare Demonstration—EverCare sites enroll elderly beneficiaries who are residents of nursing facilities. A subsidiary of United HealthCare, EverCare is at full risk for all Medicare services for its members, but does not cover their long-term care. This demonstration model uses geriatric nurse practitioners as primary care providers and case managers to furnish more services at the nursing facility. In addition, physicians who contract with EverCare receive a higher reimbursement rate when they visit the nursing facility. Over the course of five years, payment is being reduced from 100 percent of the AAPCC to 95 percent and then to 93 percent. The payment is based on the AAPCC for institutionalized beneficiaries, which is between 1.5 and 2.3 times the unadjusted AAPCC.

Social HMO Demonstration—Social HMOs test the addition of a chronic care benefit to the typical Medicare risk plan package. To prevent adverse selection, social HMOs can limit the number of beneficiaries who are severely impaired to 5 percent of enrollment. As a result, social HMO enrollees are generally noninstitutionalized aged beneficiaries. The chronic care benefit, which is limited by a yearly dollar cap, is available only to enrollees who meet certain impairment criteria. Social HMOs receive payment that is 100 percent of a modified AAPCC, designed so that reimbursement is lower for those that enroll a larger proportion of healthy members. In addition, two sites receive a capitation payment from Medicaid for dual eligibles. One sponsor is a Medicare risk contractor, and the other two are long-term care organizations.

In 1990, the Congress established a second generation of social HMOs. This model, based partly on evaluations of the earlier one, has intensified

Table 2-14. Medicare Managed Care Demonstrations for Special Populations

Name	Population	Benefit	Model	Medicare Payment
Social HMO	Elderly	Medicare, limited long-term care	Controlled enrollment, impairment criteria for long-term care benefit	AAPCC; if nursing home eligible, institutional rate AAPCC
PACE	Elderly, nursing home eligible but community resident	Medicare, Medicaid, all long-term care	Adult day health centers	95 percent of AAPCC × 2.39
EverCare	Elderly, nursing home resident	Medicare	Geriatric nurse practitioners, physician financial incentives	Institutional rate AAPCC, reduced to 95 percent, then to 93 percent
ESRD	Beneficiaries with ESRD	Medicare, ESRD services	HMOs and participating dialysis and transplant facilities	ESRD AAPCC, adjusted for treatment and patient characteristics

Note: HMO = health maintenance organization. PACE = Program of All-inclusive Care for the Elderly. AAPCC = average annual per capita costs. ESRD = end-stage renal disease.

SOURCE: Health Care Financing Administration, Office of Research and Demonstrations.

case management, an expanded chronic care benefit, and modified risk adjustment.

PACE Demonstration—The Program of All-inclusive Care for the Elderly (PACE) is designed for frail elders who are certified by the state as being eligible for nursing home placement, but who actually live in the community. In this model, all acute care and a full range of long-term care services are provided under full capitation. Since the majority of enrollees are dual eligibles, payment is made by both Medicare and Medicaid.

The PACE program is centered around adult day health centers (ADHCs), a model pioneered by another demonstration, On Lok Senior Health Services. Multidisciplinary teams deliver primary care at the ADHC, and arrange for hospitalization and nursing home placement. The Medicare portion of the payment is 95 percent of the AAPCC, multiplied by a PACE-specific adjuster of 2.39. Sites individually negotiate the Medicaid payment with the state and share risk with both programs during the first three years of operation.[41] PACE sites are being sponsored by hospitals or community organizations.[42] Preliminary evaluation of the program indicated that enrollment rates have been below targets, possibly due to the required ADHC visits and loss of provider choice.[43]

ESRD Managed Care Demonstration—Beneficiaries with ESRD cannot join a risk plan unless they belonged to an HMO with a risk contract before they became eligible for Medicare. HCFA has begun a three-year demonstration project to test managed care for these beneficiaries. Plans will receive 100 percent of the state-level ESRD AAPCC and must provide additional non-covered benefits. Each site will contract individually with the state for its dually eligible enrollees.

This demonstration will also test risk adjustment for treatment status (such as dialysis, transplant, or a functioning graft); age group; and cause of renal failure. At least one site is planning to give a financial bonus to physicians and dialysis facilities that achieve target levels of dialysis adequacy. Participating HMOs are expected to begin enrollment in 1997.

Medicaid Managed Care for Special Populations

The experiences of state Medicaid programs may provide insight into payment and program design issues associated with enrollment of the disabled in managed care. Although 25 states currently have managed care programs enrolling their disabled Medicaid beneficiaries, these programs are extremely varied in the range of populations targeted and the services included under capitation.

Of particular interest to the Medicare program are states' efforts to bring the dually eligible disabled and elderly into their Medicaid managed care programs. Dual eligibility raises a number of issues, including freedom of choice of providers, and each program's responsibility for coverage and financing. Coordinating payment from the two programs to cover the full array of primary, acute, and long-term care services is expected to generate savings, limit cost shifting between the two programs, and improve the quality of care.

Medicaid Managed Care for the Disabled—Several state managed care programs have modified features originally designed for women and children to accommodate their disabled enrollees. These include definitions of medical necessity, requirements for active case management, allowances for continuity of care, and increased monitoring to ensure adequate care. For example, Massachusetts will allow beneficiaries to use specialists as primary care providers and providers outside the plans' geographic service areas, in cooperation with a case manager.[44] Independent living centers are sponsors of the Wisconsin Partnership Program for Persons with Physical Disabilities.[45]

States also have developed various strategies to risk adjust payment rates for plans covering disabled beneficiaries. Ohio's payment rates for its Accessing Better Care program are based on a system of cost categories.[46] A beneficiary's cost category is determined from the beneficiary's prior expenditures under fee-for-service. Massachusetts uses a three-rate diagnosis-based system for its disabled enrollees.

Both reinsurance and risk corridors are being used to share risk with plans. Oregon makes plans covering disabled persons responsible for all costs

up to a threshold amount, after which the state pays an increasingly larger percentage of per beneficiary costs as these mount. States that have risk corridors, such as Massachusetts, Utah, and Wisconsin, also underwrite plans' losses on a sliding scale. However, plans must also share with the state any excess revenue above an established profit threshold, also on a sliding scale.

Managed Care for Dual Eligibles—The Minnesota Senior Health Options project is the most developed of the state initiatives integrating payment and delivery of care for dual eligibles. This five-year demonstration is currently the only state program with the waiver authority to purchase Medicare and Medicaid services in one contract. Enrollment is voluntary and limited to dually eligible elderly beneficiaries.

In addition to Medicare and Medicaid services, the benefit package includes case management and certain extended home care waiver benefits for the nursing home eligible. For those who enroll while living in the community, the first 180 days of nursing home care are also covered. Capitation payments vary across four categories, based on place of residency and eligibility for nursing home care, and are designed to equalize financial incentives across these settings. Contractors are HMOs or community integrated service networks (including HMOs that are too small to have Medicare risk contracts).

CONCLUSIONS

Medicare's managed care program has experienced rapid increases in plan participation and enrollment. Risk plans are available in more areas than previously, and many areas are seeing greater competition among risk plans. Beneficiaries are attracted by the extra benefits offered by most plans.

Medicare's payment method for risk plans is an increasing source of concern. First, there is evidence that Medicare is overpaying plans that have favorable risk selection, because the capitation payments do not adequately reflect beneficiary health status. Second, the link between fee-for-service spending and plan capitation rates is problematic due to the likely effects of selection on fee-for-service spending patterns, and because the rates themselves vary so much across counties. Addressing these issues is not easy, however, since plans and beneficiaries probably will resist payment method changes that lower capitation amounts, which might result in less generous benefit packages. Without changes to the payment method, though, Medicare cannot share in HMOs' savings from reduced health care spending.

It is possible that Medicare may reap some rewards from managed care, even if it is not able to capture these savings. Providers contracting with managed care plans may adopt more efficient practice styles for their fee-for-service patients. If this occurs, fee-for-service spending growth would slow. Research on the relationship between managed care activity and fee-for-service spending is inconclusive, however.[47] That may be because this relationship is not strong or because Medicare payment policies or risk selection mask whatever relationship exists.

There are other policy issues besides those concerning payment. The first is whether quality can be monitored in such a way as to make beneficiaries confident that enrolling in a managed care plan will maintain or improve the care they receive. HCFA is devoting significant resources to providing beneficiaries with comparative information on plans. It is still unclear, though, what information best meets beneficiaries' own needs for deciding between fee-for-service and managed care and for choosing among plans.

A second, related set of issues centers on whether the risk program is a good choice for beneficiaries with chronic health problems and impairments. The lack of adequate risk adjusters for payment is a particular concern for these beneficiaries, since they may be more likely to use expensive care. Without appropriate payments for these populations, plans that enroll them may face financial losses. An open question is whether the providers in risk plan networks are best suited to caring for beneficiaries with special health care needs. Other unanswered questions are whether managed care will improve care for these populations through case management and coordinated care, and whether plans will respond to the incentives under capitation by inappropriately limiting beneficiaries' service use.

As the Medicare managed care program grows, these issues will be increasingly important for Medicare. Some may be addressed by the Congress through changes in statute. HCFA is using its demonstration authority to explore options and alternatives to risk program features. These may prove a useful resource for learning about ways to enhance Medicare's managed care program to meet fiscal and beneficiary needs.

Notes to Chapter 2

1. Part B, Medicare Supplementary Medical Insurance, covers Medicare beneficiaries for physician services, medical supplies, and other outpatient treatment. Part A, Medicare Hospital Insurance, covers beneficiaries for inpatient hospital, home health, hospice, and skilled nursing facility services.

2. See Prospective Payment Assessment Commission, *Report and Recommendations to the Congress, March 1, 1997* (Washington, DC: ProPAC, March 1997), for the Commission's recommendations on improving the risk contracting program payment rates.

3. Gerald Riley and others, "Health Status of Medicare Enrollees in HMOs and Fee-for-Service in 1994," *Health Care Financing Review* 17(4):65-76, Summer 1996; Physician Payment Review Commission, *Annual Report to Congress 1996* (Washington, DC: PPRC, 1996); Jerrold Hill and others, *The Impact of the Medicare Risk Program on the Use of Services and Costs to Medicare*, Health Care Financing Administration, Contract No. 500-88-0006, December 3, 1992.

4. William J. Scanlon, director of health financing and systems, Health, Education, and Human Services Division, General Accounting Office, "Medicare HMOs: HCFA Could Promptly Reduce Excess Payments by Improving Accuracy of County Payment Rates," in testimony before the Subcommittee on Health, Committee on Ways and Means, U.S. House of Representatives, Washington, DC, February 25, 1997.

5. Joseph P. Newhouse, "Patients at Risk: Health Reform and Risk Adjustment," *Health Affairs* 13(1):132-46, Spring 1994.

6. Robert D. Reischauer, senior fellow, Brookings Institution, "Medicare: 2002 and Beyond," in testimony before the Subcommittee on Health, Committee on Ways and Means, U.S. House of Representatives, Washington, DC, February 13, 1996.

7. "Denver Competitive Bidding Test on Track for 1998, HCFA Chief Says," *Bureau of National Affairs's Health Policy Report* 5(10): 395, March 10, 1997.

8. Congressional Budget Office, *Predicting How Changes in Medicare's Payment Rates Would Affect Risk-Sector Enrollment and Costs*, March 1997; ProPAC, *Report and Recommendations to the Congress, March 1, 1997.*

9. Between December 1995 and January 1997, 109 new plans were started. Of these, 19 were sponsored by HMOs that had risk plans in a different area of the same state in 1995. Of the 90 others, 16 were offered by seven newly participating HMOs, each offering two or more contracts; 74 plans were sponsored by a new HMO with a single contract. Thus, the 109 new plans represented new participation by 81 HMOs.

10. Plans were counted as serving an MSA if they included in their Medicare service area at least one of the counties that makes up the MSA.

11. Rural counties with risk plans are less likely to be counties characterized in the categories "persistent poverty" (where people with incomes below poverty constitute 20 percent or more of the population) or "transfers dependent" (where income from government payments is 25 percent or more of total personal income). These county characteristics are based on typology codes from the Department of Agriculture's Economic Research Service in 1989.

12. 42 CFR §417.413.

13. Health Care Financing Administration, Office of Managed Care, "Calculating the 50/50 Rule," Operational Policy Letter 95.031, November 20, 1995.

14. HMOs may use in their count enrollment in their POS and PPO options so long as the products generally meet the qualifications of competitive medical plans. These options must provide a specified minimum level of benefits and be paid under capitation, offered in the same area as the Medicare product, and subject to a

quality assurance system that is substantially the same as Medicare's.

15. Frederick/Schneiders, Inc., *Analysis of Focus Groups Concerning Managed Care and Medicare*, report prepared for the Henry J. Kaiser Foundation, March 1995.

16. Due to data limitations, HCFA does not report the number of beneficiaries who have a POS option. It does report the number of beneficiaries in plans that offer the option.

17. Under the adjusted community rate proposal format, risk plans can charge enrollees a premium equal to the national average cost-sharing amount incurred by beneficiaries under fee-for-service.

18. In addition to enrollee cost-sharing amounts, plan premiums may also include the actuarial value of additional services they choose to offer in excess of the savings amount and any cost-sharing requirements.

19. For this analysis, the cost index did not include plans' administrative expenses and profit. These costs also are plan projections and are not audited by the Medicare program.

20. A regression analysis found that plan payment rates account for 32 percent of the variation in extra benefits.

21. Beneficiaries eligible for Medicare because of ESRD (unless they already belonged to an HMO with a risk contract when they became Medicare-eligible) or who elect hospice care are not permitted to join a risk plan.

22. Sarah Williams, "Denver Demonstration Tests Use of Enrollment Broker," *Medicine & Health Perspectives* 51(9): 3, March 1, 1997.

23. Physician Payment Review Commission, *Annual Report to Congress 1996*.

24. 61 *Fed. Reg.* 69,034 (Dec. 31, 1996).

25. Under the rule, the requirement for stop-loss insurance applies to those plans that have 25,000 or fewer enrollees and arrangements that base 25 percent or more of physicians' total reimbursement on their referral patterns. The stop-loss policy must cover at least 90 percent of the costs of referrals that exceed 25 percent of potential payments.

26. Health Care Financing Administration, Office of Managed Care, "Physicians' Advice and Counsel to Beneficiaries Enrolled in Medicare Managed Care Plans," Operational Policy Letter 96.044, November 25, 1996.

27. Health Care Financing Administration, Office of Managed Care, "Medicare Managed Care Plans' Benefits and Coverage of Certain Surgical Interventions for Treatment of Breast Cancer," Operational Policy Letter 97.049, February 12, 1997.

28. As part of the HEDIS reporting requirement, risk and cost plans must provide information on the proportion of members who were prescribed beta blocker treatment after a heart attack, diabetics who had at least one retinal exam during the year, women who had a mammogram, and members who received follow-up treatment (within 30 days) after hospitalization for mental illness.

29. Health Care Financing Administration, Office of Managed Care, Quality and Performance Standards, Short Form (SF) - 36 Health Survey, 1997.

30. Margaret Gerteis and others, *Through the Patient's Eyes* (San Francisco: Jossey-Bass, 1993).

31. Stanley B. Jones, "Why Not the Best for the Chronically Ill?" Health Insurance Reform Project, George Washington University, January 1996.

32. John E. Ware, Jr. and others, "Differences in 4-Year Health Outcomes for Elderly and Poor, Chronically Ill Patients Treated in HMO and Fee-for-Service Systems," *Journal of the American Medical Association* 276(13):1039-47, October 2, 1996; Physician Payment Review Commission, *Access to Care in Medicare Managed Care: Results from a 1996 Survey of Enrollees and Disenrollees*, Selected External Research Series, No. 7 (Washington, DC: PPRC, 1996).

33. Richard Kronick and others, "Diagnostic Risk Adjustment for Medicaid: The Disability Payment System," *Health Care Financing Review* 17(3):7-33, Spring 1996. Neil R. Powe and others, "Systemwide Provider Performance in a Medicaid Program: Profiling the Care of Patients with Chronic Illnesses," *Medical Care* 34(8):798-810, August 1996.

34. The Medicare disabled are under 65 and make up 97 percent of all beneficiaries in this age group (the rest have ESRD). When they turn 65, Medicare switches their status from disabled to aged. In the analysis of enrollment rates by age and geographic location, the group of beneficiaries under 65 was used a proxy for the Medicare disabled.

35. Margaret H. Davis and Ellen O'Brien, "Profile of Persons With Disabilities in Medicare and Medicaid," *Health Care Financing Review* 17(4):179-211, Summer 1996.

36. General Accounting Office, *Social Security: Disability Rolls Keep Growing, While Explanations Remain Elusive*, GAO/HEHS-94-34, February 1994, Appendix II.

37. Jane L. Ross, director of income security issues, General Accounting Office, "Social Security: Federal Disability Programs Face Major Issues," in testimony before the Special Committee on Aging, U.S. Senate, Washington, DC, March 2, 1995.

38. Margo L. Rosenbach, "Access and Satisfaction Within the Disabled Medicare Population," *Health Care Financing Review* 17(2):147-67, Winter 1995.

39. Mary L. Durham, "Can HMOs Manage the Mental Health Benefits?" *Health Affairs*, 14(3):116-23, Fall 1995; Kenneth Wells and Roland Sturm, "Care for Depression in a Changing Environment," *Health Affairs* 14(3):78-89, Fall 1995; John Ware and others, "Differences in 4-Year Health Outcomes"; David Mechanic, Mark Schlesinger, and Donna D. McAlpine, "Management of Mental Health and Substance Abuse Services: State of the Art and Early Results," *Milbank Quarterly*, 73(1):19-55, 1995.

40. Davis and O'Brien, "Profile of Persons With Disabilities."

41. For most sites, the Medicaid amount covers about two-thirds of the total payment and is discounted from a base rate calculated from historical costs for analogous nursing home or community care Medicaid populations.

42. Under the Omnibus Budget Reconciliation Act of 1986, the demonstration is limited to 15 sites and will expire in 1998.

43. Laurence G. Branch and others, "The PACE Evaluation: Initial Findings," *The Gerontologist* 35(3):349-59, June 1995.

44. General Accounting Office, *Medicaid Managed Care: Serving the Disabled Challenges State Programs*, GAO/HEHS-96-136, July 1996.

45. Two sites in Wisconsin enroll Medicaid and dually eligible disabled persons who also qualify for nursing home care. Participation is voluntary and beneficiaries can disenroll at any time. The sites are sponsored by community-based long-term care organizations that have subcontracted with various providers and HMOs. They furnish acute care, physician services, and home or community support services, coordinated with the enrollee by a multidisciplinary team. Capitation payments are based on a discounted Medicaid institutional rate, with risk sharing. Medicare capitation payment will be added in 1998.

46. Ohio's Accessing Better Care is a three-county demonstration project for people with physical disabilities and chronic illnesses. Each site is a partnership between an HMO and an academic health center. This voluntary program features a nurse case manager and additional preventive and long-term care benefits. Enrollment began in March 1995.

47. Jay P. Bae, *Comments on the Price Waterhouse Spillover Study* (Baltimore: Health Care Financing Administration, Office of Research and Demonstrations, April 15, 1995); Laurence C. Baker, *Can Managed Care Control Health Care Costs: Evidence from the Medicare Experience*

(Princeton: Princeton University and Robert Wood Johnson Foundation, November 1993); Randall S. Brown and others, *The Medicare Risk Program for HMOs: Final Summary Report on Findings from the Evaluation* (Princeton: Mathematica Policy Research, Inc., February 1993); Delores Clement and others, *The Effects of Risk Contract HMO Penetration on Medicare Fee-for-Service Costs* (Princeton: Medical College of Virginia and Mathematica Policy Research, Inc., December 1992); Jack Rodgers and Karen E. Smith, *Do Medicare HMOs Reduce Fee-for-Service Costs? Report to Group Health Association of America* (Washington, DC: Price Waterhouse, September 1995); W. Pete Welch, *HMO Market Share and its Effect on Local Medicare Costs* (Washington, DC: Urban Institute, February 1991).

Chapter 3

Hospital Payments, Costs, and Financial Condition

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Hospital Payments, Costs, and Financial Condition

The hospital industry is undergoing a historic transformation in structure and function. A major cause of this transformation is an ongoing shift in the demand for hospital services, away from acute inpatient care and toward treatment in ambulatory and post-acute settings. This evolution of medical practice patterns reflects both the cumulative effects of advances in technology and fundamental changes in the behavior of public and private health care purchasers and providers.

During the last two decades, rapid advances in medical science and technology have greatly expanded the tools available for patient care. The explosion of knowledge has provided a growing stream of new drugs; less-invasive surgical techniques; and major improvements in the quantity, relevance, and timeliness of patient clinical information. Expanding clinical capabilities have been accompanied by profound changes in physicians' beliefs about the necessity and duration of inpatient acute care for many conditions compared with treatment in ambulatory and post-acute settings. These trends have played an important role in altering the quantity and the mix of services demanded of hospitals.

Both the direction and the pace of change have been influenced by the restructuring of health care financing. In the 1980s, Medicare reformed its payment method for hospital inpatient care by adopting predetermined per case payment rates under the prospective payment system (PPS). Since then, the Congress has restrained annual increases in the PPS payment rates to limit spending and to put financial pressure on hospitals. Until the early 1990s, hospitals generally were able to escape much of this pressure by obtaining higher payments from private payers. (See Chapter 1.) Rising payments from private payers were, in turn, financed by continuing increases in private insurance premiums, resulting in a growing financial burden on employers and other purchasers of coverage.

Employers responded by shifting away from traditional indemnity insurance and toward managed care plans. These plans attempt to control health care use and spending by playing an active role in the organization and delivery of services. They also generally demand price discounts from providers and use payment methods that force providers to assume some of the financial risk of service use.

The shift toward managed care arrangements has altered the financial incentives faced by all providers of care. Along with continuing payment restraint under Medicare and Medicaid, increased managed care enrollment has accelerated the ongoing reorientation of medical practice patterns and imposed unprecedented financial pressure on hospitals. Consequently, hospitals are finding it necessary to adapt to their changing role in the continuum of care while facing an environment of greater financial risk.

Rising financial pressure has led hospitals to reduce their acute inpatient capacity and costs, and expand into related lines of business like outpatient and post-acute care services. Many have also established a variety of contractual relationships with other types of providers, or consolidated with other hospitals. Hospitals' efforts to lower costs have succeeded in improving their financial performance. The same financial pressures, however, also may threaten other important missions traditionally carried out by some hospitals. These include operating graduate medical education (GME) programs, conducting unsponsored research, providing high-cost specialized services like trauma and burn care, and furnishing uncompensated care to the poor and uninsured.

This chapter examines how hospitals are responding to ongoing changes in their economic environment. Although much of the recent impetus for change is due to rising financial pressure

from private payers, Medicare's payment policies also strongly affect hospitals' financial condition. The chapter begins by reviewing these policies and the distribution of payments under PPS. The next section describes trends in hospitals' financial performance under PPS and overall, emphasizing the key role played by the recent slowdown in cost growth. The third section focuses on how changes in medical practice and the health insurance market have affected the demand for hospital services, hospital revenues, and the financial pressures these facilities face. Related changes in hospital and industry structure are also described.

The fourth section explores how hospitals have managed to slow cost growth, highlighting recent trends in inpatient utilization and capacity, as well as employment, wages, and productivity. The last section describes the distribution of teaching and research activity, capacity for high-cost specialty care, and uncompensated care burdens among hospitals, along with the flow of funds supporting them. These missions—and the facilities that pursue them—may be especially vulnerable to continuing changes in the organization and financing of health care.

MEDICARE PAYMENTS TO HOSPITALS

Medicare pays hospitals for a wide range of patient care services furnished to program beneficiaries. Most services are those traditionally produced by hospitals, including inpatient acute care and outpatient services like emergency room visits, diagnostic tests, or ambulatory surgery. Increasingly, however, many hospitals provide post-acute care services, such as medical rehabilitation, skilled nursing facility (SNF) services, and home health care. Hospitals also receive Medicare payments that help cover the costs of operating approved training programs for physicians, nurses, and allied health professionals.

Medicare uses a variety of methods to establish the amount of payment for these services. The method and payment amount usually depend on the type of service and the setting in which it is furnished. Consequently, Medicare's payment for an identical service often differs according to the type of hospital and the inpatient, outpatient, or post-acute unit providing the service. A beneficiary who receives a service is generally responsible for a portion of the payment amount and the program pays the remainder.

In fiscal year 1997, Medicare payments to hospitals are expected to total $124.7 billion (see Table 3-1). The largest category, $78.9 billion (63 percent), consists of payments under PPS for the operating and capital costs of inpatient stays in acute care hospitals. Nine-tenths of total PPS payments come from the program and the rest from beneficiary copayments. Another $13.2 billion (11 percent) represents payments for operating and capital costs of inpatient care in those hospitals and distinct-part units that are excluded from PPS. This amount is about evenly divided between excluded hospitals, such as psychiatric and rehabilitation facilities, and distinct-part units of PPS hospitals.

Table 3-1. Estimated Total Medicare Payments to Hospitals, by Payment Type and Source, Fiscal Year 1997 (In Billions)

Payment Type and Source	Amount
Total	$124.7
PPS	78.9
Program	72.0
Operating	64.0
Capital	8.0
Beneficiary copayments	6.9
PPS-excluded	13.2
Program	12.0
Operating	11.2
Capital	0.8
Beneficiary copayments	1.2
Outpatient	20.9
Program	12.6
Beneficiary copayments	8.3
Post-acute*	9.2
Program*	9.0
Beneficiary copayments*	0.2
Direct medical education	2.5
Interns and residents	2.2
Nursing and allied health	0.3

Note: Payments are incurred expenditures for hospital services during the fiscal year. Payments for related physician services are not included, except for those furnished by interns and residents.

* Estimates are based on ProPAC analysis of data from the Health Care Financing Administration and the Congressional Budget Office.

SOURCE: Congressional Budget Office, March 1997 estimates.

Payments for hospital outpatient services account for $20.9 billion, or 17 percent of the total. Beneficiaries will be responsible for 40 percent of these payments. Hospitals will be paid another $9.2 billion (7 percent) for skilled nursing facility services and home care. Beneficiaries will account for only about 2 percent of these payments.[1] Finally, hospitals will receive $2.5 billion, about 2 percent of the total, to defray Medicare's share of the direct costs of operating training programs for physicians, nurses, and allied health professionals. The overwhelming majority of these payments will go for GME programs training interns and residents.

Medicare's payment policies have a major effect on hospital behavior and financial performance. This is true, in part, because of the sheer magnitude of these payments, which account for almost 40 percent of hospitals' total revenues. Program policies also strongly affect the distribution of payments among facilities. Moreover, they create financial incentives that influence hospitals' decisions about which services to offer and how to produce them.

PPS Payment Rates

In fiscal year 1984, Medicare began paying acute care hospitals for inpatient services using predetermined per case payment rates. PPS payments were intended to cover hospitals' operating costs for inpatient care, excluding costs for capital (primarily depreciation, interest, and rent) and approved medical education programs. Initially, Medicare continued to pay its share of these excluded costs based on each hospital's experience. In fiscal year 1992, Medicare began prospective payment for capital costs, using fixed per case payment rates. Hospital-specific prospective payments for GME programs were initiated, separate from PPS, in fiscal year 1985.[2]

A hospital's PPS operating and capital payments for a case are determined in a similar way. Each payment consists of three main components. The first is a base payment amount that represents Medicare's standard payment per case in the hospital's location. The base payment amount is determined by adjusting a national standardized payment amount to reflect the relative level of input prices (such as those for labor, supplies, or capital assets) in each area. The second payment component is a weight that accounts for the relative costliness of the specific type of case compared with the national average Medicare case. The product of the first two components is the hospital's base payment rate for the case. The third component includes additional amounts that may be paid for unusual cases or to hospitals that operate teaching programs or serve low-income patients.

Base Operating Payment Rates—In fiscal year 1997, average base operating payment rates are expected to vary widely among hospital groups (see Table 3-2).[3] This variability reflects the combined effect of several factors. The national standardized payment amount is slightly higher for hospitals located in large urban areas (metropolitan statistical areas, or MSAs, with a population of one million or more) than for those located in other urban or rural areas.[4] Differences in the average standardized amounts for other groups—teaching hospitals, for example—simply reflect the distribution of the group's hospitals among large urban and other areas.

The standardized amount is then adjusted for two factors that are expected to affect hospitals' operating costs per case for inpatient care. One accounts for differences in hospital wage rates across areas, as indicated by a wage index for each MSA and for the rural areas in each state.[5] This index measures the relative level of hourly wages for hospital workers in each labor market area compared with the national average. Hospital wage rates generally are higher in urban areas than in rural ones, although they vary substantially among both types of areas.[6] The wage adjustment may strongly affect the base operating rates for individual hospitals, lowering them as much as 23 percent or raising them as much as 36 percent.

The second factor is intended to capture cost differences among types of cases, as indicated by the diagnosis-related group (DRG) to which each patient is assigned. For each DRG, a relative weight is computed that represents the average standardized hospital charges for cases in that category compared with the national average standardized charges for all Medicare cases. Each hospital's wage-adjusted standardized payment amount is multiplied by the weight for a DRG to obtain its base operating payment rate for that type of case.[7] A hospital's average base operating payment rate is therefore directly affected by its mix of Medicare cases among the DRGs.

Table 3-2. Factors Affecting Estimated Fiscal Year 1997 PPS Base Operating Payments, by Hospital Group

Hospital Group	Number of PPS Hospitals	Average Standardized Amount	Average Wage Index	Average Case-Mix Index	Other Factors	Base Payments Per Case
All hospitals	5,075	$3,875	0.98	1.44	1.01	$5,553
Urban	2,832	3,882	1.02	1.50	1.00	5,903
Rural	2,243	3,847	0.79	1.21	1.04	4,133
Large urban	1,567	3,908	1.09	1.50	1.00	6,205
Other urban	1,265	3,847	0.93	1.50	1.00	5,506
Rural referral	130	3,847	0.79	1.37	1.07	4,809
Sole community	648	3,847	0.80	1.16	1.09	4,212
Other rural	1,465	3,847	0.78	1.18	1.01	3,887
Major teaching	263	3,895	1.12	1.66	1.00	6,985
Other teaching	811	3,879	1.00	1.55	1.00	6,014
Non-teaching	4,001	3,868	0.93	1.33	1.01	4,982
DSH:						
Large urban	786	3,908	1.10	1.52	1.00	6,335
Other urban	679	3,847	0.92	1.52	1.00	5,541
Rural	448	3,847	0.76	1.21	1.03	4,022
Non-DSH	3,162	3,874	0.96	1.39	1.01	5,328
Teaching and DSH	701	3,883	1.03	1.59	1.00	6,300
Teaching only	373	3,885	1.04	1.56	1.01	6,246
DSH only	1,212	3,867	0.94	1.37	1.00	5,096
No teaching or DSH	2,789	3,869	0.93	1.31	1.01	4,901
Urban <100 beds	700	3,877	1.00	1.21	0.99	4,672
Urban 100-199 beds	925	3,881	1.03	1.36	1.00	5,356
Urban 200-299 beds	567	3,880	1.02	1.47	1.00	5,778
Urban 300-399 beds	316	3,880	1.01	1.55	1.00	6,048
Urban 400-499 beds	157	3,884	1.02	1.59	1.00	6,273
Urban 500+ beds	167	3,887	1.04	1.70	1.00	6,790
Rural <50 beds	1,175	3,847	0.79	1.06	1.01	3,502
Rural 50-99 beds	656	3,847	0.79	1.16	1.03	3,925
Rural 100-149 beds	240	3,847	0.79	1.26	1.05	4,331
Rural 150-199 beds	97	3,847	0.79	1.27	1.05	4,360
Rural 200+ beds	75	3,847	0.78	1.39	1.08	4,904
New England	213	3,887	1.14	1.42	1.00	6,104
Middle Atlantic	519	3,888	1.10	1.42	1.00	5,960
South Atlantic	719	3,868	0.91	1.46	1.01	5,335
East North Central	796	3,876	0.96	1.43	1.01	5,452
East South Central	441	3,855	0.81	1.38	1.01	4,660
West North Central	704	3,865	0.86	1.44	1.02	5,138
West South Central	726	3,867	0.85	1.45	1.01	5,067
Mountain	338	3,873	0.94	1.48	1.02	5,617
Pacific	619	3,887	1.20	1.49	1.00	6,635
Voluntary	2,946	3,877	1.00	1.46	1.01	5,702
Proprietary	692	3,875	0.95	1.44	1.01	5,429
Urban government	420	3,874	0.99	1.48	1.00	5,679
Rural government	966	3,847	0.77	1.15	1.02	3,802

Note: PPS payments are estimated using rules in effect as of October 1, 1996. Excludes hospitals in Maryland. Averages are weighted by the number of Medicare cases in each hospital. The other factors category is the combined effect of cost of living adjustments, geographic reclassification, and payment adjustments for sole community hospitals. Ownership data are missing for 51 hospitals. DSH = disproportionate share.

SOURCE: ProPAC PPS payment model, MedPAR data for fiscal year 1995 from the Health Care Financing Administration, and the Congressional Budget Office March 1997 estimates.

The case-mix index (CMI) measures the average DRG weight for the cases discharged by a hospital or group of hospitals. The CMI varies widely among individual facilities, ranging from 0.55 to 2.62 for hospitals with at least 1,000 Medicare cases in fiscal year 1995. Hospitals located in large urban areas and teaching hospitals have higher base operating payment rates than rural hospitals, on average, partly because they treat patients with more complex and costly illnesses.

Hospitals' average base operating payment rates also reflect two policies enacted in the Omnibus Budget Reconciliation Acts (OBRA) of 1989, 1990, and 1993. One of these allows a hospital to request reclassification from the geographic area in which it is located to a nearby area that is more advantageous. Reclassification, which must be approved annually by the Medicare Geographic Classification Review Board (MGCRB), can change a hospital's standardized payment amount, its wage index, or both. The number of hospitals reclassified peaked at about 1,200 in fiscal year 1993. According to the Health Care Financing Administration (HCFA), operating payments for the hospitals reclassified that year were expected to be about 4.6 percent higher, on average, than those they would have received without reclassification.[8] The criteria for reclassification were tightened in the following year, substantially reducing the number of eligible hospitals. Only 477 hospitals are reclassified for fiscal year 1997; operating payments for these hospitals are expected to be 5.4 percent higher than they otherwise would have been.[9]

Average base operating payment rates for sole community hospitals also differ from those for other facilities. Sole community hospitals are geographically isolated facilities considered to be the only readily available source of inpatient acute care in their communities. These hospitals receive payments based on their updated 1982 or 1987 costs or the PPS rates, whichever are greatest. In fiscal year 1997, about half of the 648 sole community hospitals are expected to receive higher payments based on their 1982 or 1987 costs than they would get using the PPS rates.

A hospital's base operating payments per case thus reflect its location, local wage rates, and mix of Medicare cases. About one-fifth of all hospitals also benefit to some degree from the other policies just described. These factors explain why average base operating payments per case are higher for some types of hospitals than for others. Hospitals located in large urban areas receive greater payments per case than those in other urban or rural areas, reflecting historical and continuing differences in costs. Wage rates in large urban labor markets generally exceed those in other areas. Similarly, these hospitals tend to treat a more complex and costly mix of Medicare patients, and to provide care that is more resource-intensive.

Distribution of Operating Payments—In addition to the base operating rates, hospitals receive extra payments under PPS for cases with extraordinarily high costs or unusually long stays (outliers).[10] The PPS operating payment rates are also adjusted for hospitals that operate graduate medical education programs to train residents and those that serve a disproportionate share of low-income patients. These factors further increase PPS operating payments per case for urban hospitals—which receive most teaching and disproportionate share (DSH) payments—compared with the average for rural facilities.

In fiscal year 1997, PPS operating payments are expected to continue to differ substantially among hospital groups (see Table 3-3). The 2,832 urban hospitals, for example, represent 56 percent of all PPS hospitals, but they will account for 80 percent of all PPS cases and 87 percent of related operating payments. Rural facilities will treat 20 percent of PPS cases, but they will receive only 13 percent of operating payments.

These differences in the share of PPS operating payments are partly related to variations in facility size and case volume. For example, urban hospitals with 500 or more beds represent less than 4 percent of all facilities but are expected to have 14 percent of PPS cases. By contrast, 23 percent of PPS hospitals are rural facilities with fewer than 50 beds, but they will account for an estimated 4 percent of all PPS cases.

Variations in the share of PPS operating payments among hospital groups also reflect Medicare's payment policies. Some of this variation is due to factors like local wage rates and case mix that affect each hospital's base operating payment

Table 3-3. Distribution of PPS Hospitals and Discharges and Estimated Fiscal Year 1997 PPS Operating Payments, by Hospital Group

Hospital Group	Number of PPS Hospitals	Percent of Discharges	Percent of Payments	PPS Operating Payments (In Billions)			
				Total	Outlier	IME	DSH
All hospitals	5,075	100%	100%	$70.9	$3.1	$4.6	$4.5
Urban	2,832	80	87	61.7	2.8	4.5	4.3
Rural	2,243	20	13	9.2	0.2	0.1	0.2
Large urban	1,567	46	53	37.7	1.7	3.3	2.8
Other urban	1,265	35	34	24.0	1.1	1.1	1.5
Rural referral	130	4	3	2.1	0.1	0.0	*
Sole community	648	4	3	2.0	*	*	*
Other rural	1,465	12	7	5.1	0.1	*	0.1
Major teaching	263	12	20	14.1	0.6	3.1	1.5
Other teaching	811	32	34	24.3	1.1	1.5	1.5
Non-teaching	4,001	56	46	32.5	1.3	0.0	1.5
DSH:							
Large urban	786	25	32	22.8	0.9	2.5	2.8
Other urban	679	22	23	16.2	0.8	0.9	1.5
Rural	448	5	4	2.6	0.1	*	0.2
Non-DSH	3,162	48	41	29.4	1.3	1.1	0.0
Teaching and DSH	701	29	38	26.8	1.1	3.5	3.0
Teaching only	373	15	16	11.7	0.6	1.1	0.0
DSH only	1,212	23	21	14.8	0.6	0.0	1.5
No teaching or DSH	2,789	33	25	17.7	0.7	0.0	0.0
Urban <100 beds	700	4	3	2.3	0.1	*	*
Urban 100-199 beds	925	18	16	11.5	0.4	0.2	0.9
Urban 200-299 beds	567	20	20	14.5	0.6	0.6	0.9
Urban 300-399 beds	316	15	17	12.0	0.6	0.8	0.8
Urban 400-499 beds	157	9	11	7.7	0.4	0.8	0.6
Urban 500+ beds	167	14	19	13.6	0.7	2.0	1.1
Rural <50 beds	1,175	4	2	1.5	*	*	*
Rural 50-99 beds	656	6	4	2.6	0.1	*	*
Rural 100-149 beds	240	4	3	2.1	0.1	*	*
Rural 150-199 beds	97	3	2	1.3	*	*	*
Rural 200+ beds	75	3	2	1.7	0.1	*	*
New England	213	6	6	4.4	0.1	0.5	0.1
Middle Atlantic	519	17	20	13.9	0.7	1.4	1.0
South Atlantic	719	18	17	12.0	0.5	0.5	0.8
East North Central	796	18	17	12.2	0.5	0.9	0.5
East South Central	441	8	7	4.9	0.2	0.1	0.3
West North Central	704	8	7	4.9	0.2	0.3	0.1
West South Central	726	11	10	6.8	0.3	0.2	0.6
Mountain	338	4	4	2.9	0.1	0.1	0.1
Pacific	619	10	13	8.9	0.3	0.4	0.9
Voluntary	2,946	74	76	53.7	2.3	3.7	2.9
Proprietary	692	11	10	7.4	0.3	0.1	0.5
Urban government	420	9	10	7.2	0.3	0.8	1.0
Rural government	966	6	4	2.6	0.1	*	0.1

Note: PPS payments are estimated using rules in effect as of October 1, 1996. Numbers may not sum to total due to rounding. Excludes hospitals in Maryland. Ownership data are missing for 51 hospitals. IME = indirect medical education. DSH = disproportionate share.

* Less than $0.05 billion.

SOURCE: ProPAC PPS payment model, MedPAR data for fiscal year 1995 from the Health Care Financing Administration, and the Congressional Budget Office March 1997 estimates.

rates, as noted earlier. In addition, the distribution of operating payments is strongly influenced by variations in the prevalence of outlier cases, GME programs, and low-income patients. The Congress included these factors in the payment system to compensate for differences in the cost of treating Medicare patients that are beyond hospitals' control and to accomplish broader policy objectives.

Outlier Payments—Outlier payments are intended to protect hospitals from the risk of financial losses associated with patients who have exceptionally high costs or unusually long stays. These payments thus mitigate hospitals' incentives to avoid patients who are likely to become costly or to treat them inappropriately. In fiscal year 1997, outlier payments are expected to account for 4.5 percent of total PPS operating payments, or about $3.1 billion.

Outlier payments are financed by a 5.1 percent reduction in the standardized payment amounts. This reduction is based on HCFA's projection of the approximate share of total DRG operating payments (base operating payments plus those for outlier cases) that will be attributable to outlier payments in the next year. Outlier payments are made, however, based on the actual incidence of outlier cases. Hospitals with many such cases (or extremely expensive ones) will receive higher PPS operating payments, because their outlier payments will be more than what they lost due to the reduction noted above. The extra payments will help offset the higher costs these facilities incur in treating such patients. Hospitals with few outliers will receive smaller overall operating payments since their outlier payments will not offset the reduction completely.

Outlier payments are concentrated in certain hospital groups because some are more likely to treat cases with exceptionally high costs or long stays. Urban hospitals are expected to receive 92 percent of all outlier payments, while rural facilities will get only 8 percent. Major teaching hospitals (those with more than 25 interns and residents for every 100 beds) are projected to account for 12 percent of all PPS cases, but almost 20 percent of outlier payments. The uneven distribution of outlier payments, however, does not indicate that outlier policy is inequitable. Certain hospitals attract a more diverse mix of patients and thus face a greater risk that some will require an extraordinary amount of resources. Moreover, hospitals that have a high proportion of outlier payments in any particular year are more likely than others with similar characteristics to incur losses under PPS.

Indirect Medical Education and Disproportionate Share Payments—In fiscal year 1997, indirect medical education (IME) and DSH payments are expected to account for 12.8 percent of all PPS operating payments, or about $9.1 billion. The IME adjustment is intended to recognize hospitals' indirect costs of operating approved graduate medical education programs. Compared with other facilities, teaching hospitals offer a wider range of services and technologies and treat sicker patients. They also tend to provide a greater number and a more expensive mix of diagnostic and therapeutic services to certain types of patients.

The indirect costs of teaching are accounted for by applying a hospital-specific percentage adjustment to each teaching hospital's total DRG operating payments. The size of a hospital's IME adjustment varies according to the intensity of its teaching activities as measured by the ratio of interns and residents per bed.[11] In fiscal year 1997, IME payments are expected to account for 6.5 percent of total PPS operating payments, or about $4.6 billion.

The DSH adjustment is intended to provide extra compensation to hospitals that serve a disproportionate share of low-income patients. Some of these hospitals may have higher costs than otherwise similar hospitals due to their location (many are in poor inner-city neighborhoods) and the characteristics of their patient population. In addition, these hospitals tend to have greater uncompensated care burdens than other hospitals.

The size of a hospital's DSH adjustment depends on the percentage of its acute inpatient days furnished to certain groups of low-income patients, and a formula. Different formulas apply depending on the hospital's location in an urban or a rural area and its size (number of beds).[12] DSH payments are expected to account for 6.3 percent of total PPS operating payments, or about $4.5 billion, in fiscal year 1997.

Almost all IME and DSH payments go to hospitals located in urban areas. Further, larger hospitals

generally receive more of their total PPS operating revenues from IME and DSH payments than do smaller ones. In fiscal year 1997, payments from these adjustments will make up 28 percent of PPS operating payments for urban hospitals with 500 or more beds, but less than 1 percent for rural hospitals with fewer than 50 beds.

Many hospitals receive both IME and DSH payments. Teaching hospitals are expected to account for about 67 percent of all DSH payments, while 77 percent of all IME payments will go to disproportionate share hospitals. Consequently, IME and DSH operating payments will represent a major source of revenue for some hospitals. Major teaching hospitals, for instance, will receive an estimated 33 percent of their PPS operating payments from IME and DSH adjustments. By contrast, these payments are expected to account for only 5 percent of non-teaching facilities' PPS operating revenues.

IME and DSH payments are also distributed unevenly across geographic areas. Hospitals in the Middle Atlantic and East North Central regions will receive 50 percent of all IME payments, yet account for only 35 percent of PPS cases. Facilities in the Middle Atlantic, South Atlantic, and Pacific regions are expected to get 60 percent of DSH payments, although they have only 45 percent of cases.

PPS Capital Payment Rates—Until fiscal year 1992, Medicare reimbursed hospitals for inpatient capital costs based on their incurred expenses, including depreciation, interest, rent, and certain property-related expenses for insurance and taxes. In that year, the program began paying PPS hospitals for such costs using prospectively determined per case rates. Payments under this system in fiscal year 1997 are expected to total $8.0 billion.

Medicare's capital PPS is being phased in over a 10-year transition, which will end in 2002 with all PPS hospitals paid fully on the basis of national prospective rates. In the meantime, hospitals are paid using either a fully prospective method or a hold-harmless method. Facilities with relatively low capital costs in the 1992 base year are paid under the fully prospective method (59 percent of PPS hospitals in fiscal year 1997). Each hospital receives a blended payment rate per case that reflects both its own historical capital costs per case (the hospital-specific rate) and the national average cost experience (the Federal capital rate).[13]

Like the standardized payment amounts for operating payments, the Federal capital rate is adjusted to reflect factors that affect capital costs across areas and types of hospitals. These adjustments include a geographic factor based on the hospital's wage index, a 3 percent differential for hospitals located in large urban areas, and IME and DSH adjustments.[14] The criteria and formulas for the capital IME and DSH adjustments differ from those that apply to operating payments.

For hospitals paid under the fully prospective method, the capital payment for each case is determined by multiplying the facility's blended per case payment rate by the relative weight of the DRG to which the patient is assigned. The DRG weights are the same as those used for PPS operating payments. A hospital's capital payments thus automatically reflect its Medicare case mix.

Hospitals with high base year capital costs are paid according to the hold-harmless method. In this case, a hospital receives one of two amounts, whichever results in higher total payments. One amount equals the facility's adjusted Federal rate multiplied by the DRG weight; 28 percent of all PPS hospitals are expected to get higher payments from this amount in fiscal year 1997. The other amount is determined by blending the hospital's current reasonable costs per case for old capital with the amount it otherwise would receive based on the adjusted Federal rate (13 percent of PPS hospitals).[15]

All PPS hospitals are also eligible for capital exceptions payments. These payments are intended to ensure that PPS capital payments cover at least a minimum percentage of each facility's current Medicare-allowed capital costs. Exceptions payments are funded by a proportional reduction in the Federal and hospital-specific rates. HCFA estimates that exceptions payments in fiscal year 1997 will account for 6 percent of total capital payments to PPS hospitals.

In 1995, PPS capital payments per case varied substantially among hospital groups (see Table 3-4). Urban hospitals received $668 per case, on average, while rural hospitals got only $412. Within these

Table 3-4. PPS Capital Payments Per Case, Payment to Cost Ratios, and Capital Payments as a Share of Total PPS Payments, by Hospital Group, 1995

Hospital Group	Capital Payment Per Case	Payment to Cost Ratio	Share of Total PPS Payments
All hospitals	$616	99.5%	8.7%
Urban	668	99.5	8.7
Rural	412	99.5	8.8
Large urban	713	100.7	8.7
Other urban	608	97.7	8.8
Rural referral	511	94.5	9.2
Sole community	401	104.3	8.5
Other rural	384	100.0	8.8
Major teaching	905	101.4	7.9
Other teaching	655	99.1	8.5
Non-teaching	538	99.2	9.2
DSH:			
Large urban	760	102.3	8.4
Other urban	618	98.1	8.6
Rural	432	95.5	8.9
Non-DSH	565	98.8	9.1
Teaching and DSH	750	100.7	8.2
Teaching only	676	98.2	8.6
DSH only	566	99.2	9.0
No teaching or DSH	517	99.1	9.4
Urban <100 beds	499	100.8	9.5
Urban 100-199 beds	598	96.1	9.2
Urban 200-299 beds	634	100.5	8.9
Urban 300-399 beds	681	101.5	8.7
Urban 400-499 beds	698	101.1	8.3
Urban 500+ beds	834	99.0	8.3
Rural <50 beds	317	112.3	8.1
Rural 50-99 beds	383	102.1	8.8
Rural 100-149 beds	439	97.7	8.9
Rural 150-199 beds	448	99.3	8.9
Rural 200+ beds	536	89.3	9.3
New England	583	102.8	7.6
Middle Atlantic	699	103.8	8.6
South Atlantic	601	96.3	9.1
East North Central	566	100.5	8.5
East South Central	503	96.5	8.8
West North Central	567	93.3	8.9
West South Central	615	94.3	9.7
Mountain	608	103.4	9.1
Pacific	711	104.0	8.5
Voluntary	630	99.4	8.7
Proprietary	661	99.3	9.7
Urban government	626	100.8	8.1
Rural government	360	100.9	8.4

Note: Data are from hospital cost reporting periods beginning during Federal fiscal year 1995. Excludes hospitals in Maryland. Averages are weighted by the number of Medicare cases in each hospital. DSH = disproportionate share.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

broad categories, payment variations were even greater. Major teaching facilities, nearly all of which are in urban areas, averaged $905 per case, but urban hospitals with fewer than 100 beds received $499.

These variations reflect differences among hospital groups in the average size and complexity of their facilities, the average age of their capital assets, and the mix of payment methods that apply. Rural hospitals with fewer than 50 beds, for instance, tend to have a much smaller, older, and less costly stock of buildings and equipment than that in the largest rural facilities (more than 200 beds). Other things equal, hospitals with older buildings and equipment are likely to have relatively low capital costs because their historical costs for these assets have been more fully depreciated.

These differences also may partly account for variations in average capital payment to cost ratios among hospital groups. The capital payment to cost ratio measures the extent to which total PPS capital payments for a hospital or a group differ from its total Medicare-allowable capital costs. The smallest rural hospitals (fewer than 50 beds), for example, received PPS capital payments in 1995 that were 12.3 percent higher than their allowable costs. Although the largest rural facilities were paid $219 more per case, these payments covered only 89.3 percent of their costs. Differences between PPS capital payments and costs, however, were fairly small for most hospital groups. Moreover, since capital payments represent less than 10 percent of total PPS payments for all types of hospitals, these small discrepancies are unlikely to have a substantial effect on any class of hospitals.

As with PPS operating payments, Medicare's capital payment rates are updated annually. Though historical cost trends initially were used to update the Federal and hospital-specific rates, this approach has been replaced by an update framework. Under this framework, annual increases in the rates are based on anticipated changes in capital asset prices and other factors, such as advances in technology and changes in practice patterns, that may affect hospitals' capital costs per case.

During the first four years of prospective capital payment, the rates were also adjusted so that total payments equaled 90 percent of anticipated Medicare-allowable capital costs. Given this statutory budget neutrality requirement, the update method had little effect on capital payments to hospitals through fiscal year 1995. In fiscal year 1996, the budget neutrality requirement expired; according to HCFA, that led to an estimated 27.5 percent increase in PPS capital payments.[16] Consequently, capital payments in fiscal years 1996 and 1997 are expected to be well above costs for most hospitals.

Other Medicare Payments to Hospitals

In addition to PPS operating and capital payments, hospitals receive substantial revenue from Medicare for operating graduate medical education programs and for furnishing outpatient services to beneficiaries. Medicare also makes large payments for inpatient care provided in PPS-excluded hospitals and distinct-part units. Finally, Medicare pays hospitals for post-acute care services delivered by hospital-based skilled nursing facilities and home health agencies. (Medicare's payment policies for post-acute care services, including those provided by hospital-based entities, are discussed in Chapter 4.)

Payments for Direct Costs of Graduate Medical Education Programs—Medicare's payments to hospitals include funds to support training of interns and residents, nurses, and allied health professionals. In fiscal year 1997, Medicare will pay about $2.2 billion to hospitals for the direct costs they incur in operating approved residency training programs. These payments are in addition to those made under the IME adjustments to the PPS operating and capital payment rates. Another $300 million will be paid for the direct costs of hospital-based nursing and allied health professions training programs.

When PPS was implemented in fiscal year 1984, Medicare still reimbursed hospitals for its share of the costs of resident training programs (salaries and benefits for residents and faculty, classroom costs, and associated overhead) based on the reasonable costs they incurred. The Consolidated Omnibus Budget Reconciliation Act of 1985 created a prospective payment system for these costs. Under this system, payments are determined by multiplying three factors. One is a hospital-specific per resident payment amount, which is based on the hospital's

allowable per resident costs in the first year of PPS, updated annually by the increase in the consumer price index (CPI) for all urban consumers. The second factor is Medicare's share of the hospital's patient days. The third factor is the hospital's current count of full-time equivalent (FTE) residents. A hospital's total GME payments are thus equal to its updated per resident payment amount multiplied by Medicare's share of its patient days and then by its resident count.

Most residents participating in an approved program are counted as FTEs. Those who are beyond their initial residency period (the minimum amount of training required to become board-certified) or who have more than five years of training are counted as only half an FTE. Consequently, residents in most subspecialty fields like cardiology are counted as half an FTE throughout their subspecialty training. Residents in geriatric or preventive care programs, however, receive full weight for up to two years beyond their initial residency period.

OBRA 1993 created separate hospital-specific per resident payment amounts for primary care and non-primary care residents.[17] Rates for primary care residents have been updated every year, while those for others were frozen in fiscal years 1994 and 1995.

In fiscal year 1995, the average per resident amount was about $67,000 (though Medicare paid only its share). Among hospitals, the amount varied from less than $20,000 to well over $120,000. This variation reflects cost differences in the 1984 base period due to several factors. In some cases, all costs related to a residency program were borne by the hospital; in other instances, faculty salaries and some other costs were paid by the medical school and not counted as allowable hospital costs. In addition, hospitals' cost reporting practices vary, with some allocating more overhead costs to residency programs.

Recent growth in Medicare's GME payments has been driven by changes in the number of residents, which increased 18.3 percent from 1990 to 1995.[18] Medicare's IME and GME payment policies may have played a role in this. Both of these payments rise in proportion to the number of residents. By contrast, teaching hospitals do not get additional Medicare payments if they hire more nurses or other caregivers. Consequently, hospitals may favor residents over other workers.

As noted earlier, Medicare also provides funds for hospital-based nursing and allied health professions training programs. In fiscal year 1997, Medicare will pay hospitals about $300 million for classroom and clinical training costs of these programs. Payment is based on the reasonable costs incurred, and to be eligible for funding, programs must be operated by a hospital or have a written agreement with a hospital. Medicare's payments go primarily to diploma nursing schools. Once the training ground for most nurses, these programs have largely been replaced by baccalaureate programs operated by colleges and universities. Although nursing educators have strongly encouraged this shift, Medicare's financial support continues to focus on the shrinking diploma school sector.

Payments for Hospital Outpatient Services— In fiscal year 1997, payments for Medicare-covered hospital outpatient services are expected to be $20.9 billion. The Medicare program will pay about $12.6 billion, or 60 percent of the total; beneficiaries will be responsible for paying the other 40 percent. Outpatient services account for a rising share of hospitals' total revenues and the payments hospitals receive from Medicare. This trend is due primarily to rapid growth in the volume and complexity of outpatient care. This growth reflects continuing shifts of sophisticated surgical and diagnostic procedures from the inpatient to the outpatient setting, as well as expanding clinical capabilities in ambulatory care.

Medicare uses a variety of methods to determine payment amounts for outpatient services. In addition, beneficiary coinsurance liabilities differ among the program's payment methods. Since most outpatient services are also provided in non-hospital settings, both the program and beneficiaries pay different amounts for the same service depending on the setting in which it is furnished.

For outpatient surgical procedures that are approved for performance in a free-standing ambulatory surgical center (ASC), Medicare pays the lesser of the hospital's costs, charges, or a blended payment amount. The blended amount combines a portion of the hospital's costs or charges (whichever

is lower) with a portion of the prospective rate that would have been paid had the surgery been performed in an ASC. Radiology and selected diagnostic services are paid using the same method. For these services, the prospective payment amount in the blended rate formula is a portion of the appropriate Medicare physician fee schedule amount.

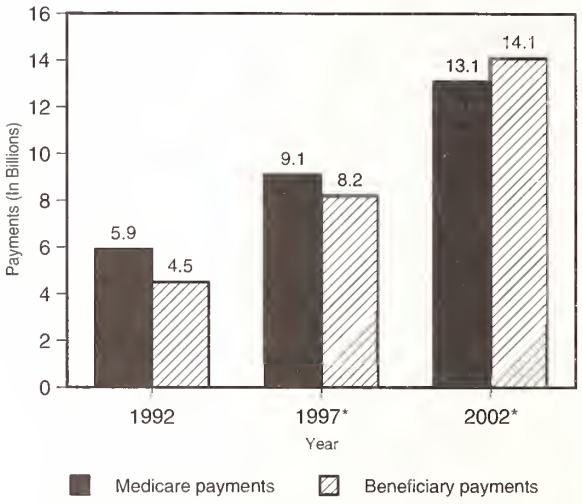
A hospital is paid the lesser of its reasonable costs or its customary charge for surgical procedures that are not approved for performance in an ASC; ambulance services; emergency room and clinic visits; and physical, speech, and occupational therapy services.[19] Medicare pays for other outpatient services, including laboratory tests and durable medical equipment, using fee schedules.

The method of determining beneficiary coinsurance amounts differs depending on the payment method Medicare uses. Beneficiaries are not liable for cost sharing on laboratory services, but they pay 20 percent of the Medicare payment amount for other services that are paid on a fee schedule. By contrast, coinsurance liability is set at 20 percent of the hospital's charges for all services where the payment is based on facility costs.

The Congress originally chose this method because the payment amounts for cost-based services could not be known when they were furnished (since they depend on the hospital's current costs). Initially, hospitals' charges and costs were roughly similar and beneficiary liabilities remained close to what they would have been if they had been based on Medicare's payment amounts. In recent years, however, hospitals' charges have been rising much faster than their costs. As a result, beneficiaries have been saddled with an increasing share of the total hospital payment for cost-based services.

In fiscal year 1997, beneficiaries' coinsurance payments for cost-based services are expected to be $8.2 billion, or 47 percent of the total (see Figure 3-1). Consequently, beneficiaries who receive such services in hospital outpatient departments generally pay much higher amounts than they would have had they been treated in a non-hospital setting like a physician's office (where coinsurance is set at 20 percent of Medicare's payment). Beneficiaries' payments for cost-based outpatient services are expected to continue growing to $14.1 billion, or 52 percent of total payments, by 2002.

Figure 3-1. Medicare and Beneficiary Payments for Cost-Based Hospital Outpatient Services, Selected Years (In Billions)



Note: Data exclude services paid using a fee schedule.

* Projected.

SOURCE: Congressional Budget Office, March 1997.

Under current Medicare policies, payments for most outpatient services increase when costs or charges rise. Because this gives hospitals little financial incentive to control costs, the Congress has mandated that Medicare develop a prospective payment system for outpatient services. In 1995, the Secretary of Health and Human Services submitted a proposal for phasing in such a system.[20] This proposal initially would have included only ambulatory surgery, radiology, and certain diagnostic procedures, with extensions and refinements over an indefinite period. About one-half of all covered outpatient services would have continued to be paid on a cost basis.

Although this proposal has not been adopted, HCFA has continued to work on expanding the basic system to include other outpatient services. The President's budget proposal for fiscal year 1998 includes a plan to implement the full system beginning in 1999. Adopting this plan would simplify outpatient payment and eliminate some of the inappropriate incentives hospitals face under the current cost-based system. It would also provide a basis for rationalizing and reducing beneficiaries' financial liabilities for outpatient care. However, Medicare and its beneficiaries would continue to pay different amounts for the same service,

depending on the setting in which it is furnished. Since hospitals increasingly own or have other contractual relationships with physician practices, ambulatory surgical centers, and clinics, opportunities and incentives may continue to exist for providers to refer patients to the most profitable settings. Further, without steps to control growth in the volume of outpatient care, Medicare's spending for ambulatory services is likely to continue to rise.

Payments for PPS-Excluded Hospitals and Distinct-Part Units—When PPS was implemented, prospective payment could not be applied to certain providers. Because DRGs fail to predict resource requirements accurately for patients treated at these facilities, they were excluded from PPS. Five types of specialty hospitals (psychiatric, rehabilitation, long-term care, children's, and cancer) and two types of distinct-part units in general hospitals (psychiatric and rehabilitation) are still exempt from PPS. In fiscal year 1997, Medicare payments to these facilities are expected to be $13.2 billion.

PPS-excluded hospitals and units are subject to payment limitations and incentives established in the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA). Each provider is paid based on its current Medicare-allowable inpatient operating costs per case or a target amount, whichever is lower. The target amount is equal to the provider's allowable operating costs per case in a base year, increased to the current year by an annual update factor. (See Chapter 4 for further discussion of issues related to the TEFRA payment rules.)

TRENDS IN HOSPITAL FINANCIAL PERFORMANCE

Although a wide variety of Medicare policy initiatives have been proposed in recent years, only a few have been enacted. Consequently, Medicare's hospital payment policies were largely unchanged through the first half of the 1990s. During this period, however, private insurers have been actively developing new insurance products and altering the way they pay for hospital services. These changes have resulted in an unprecedented slowdown in hospital revenue growth. Hospitals have responded by constraining their costs to an even greater extent. The net result has been improved financial performance over the past several years.

This section describes recent trends in hospital performance. It begins by examining PPS payments, costs, and margins. Trends in overall hospital financial condition, including changes in total revenues, costs, and margins, are reviewed next. The final section addresses variation in performance across and within groups of hospitals. (More detailed data on hospitals' financial condition over time are in Appendix B.)

Hospital Performance Under PPS

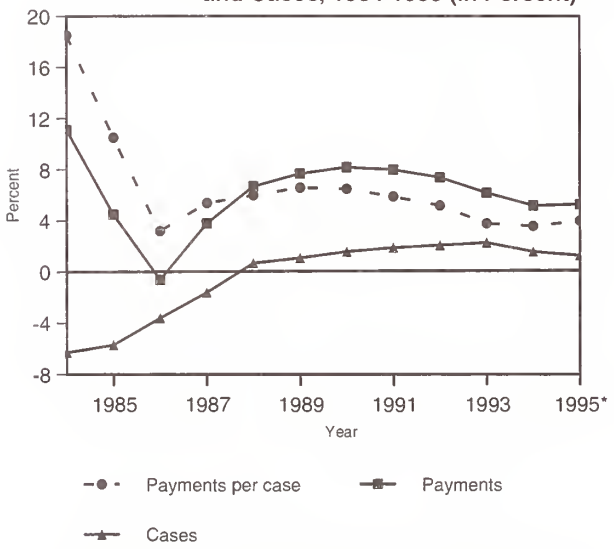
The primary objectives of PPS are to control Medicare payments and create incentives for hospitals to become more efficient and control their costs. Data on trends in PPS payments and costs, respectively, provide insight into how Medicare payment policies have changed over time and how hospitals have responded to the incentives presented by those policies and other factors that influence their behavior. The PPS inpatient margin, which compares PPS payments and the corresponding costs, indicates the amount of financial pressure faced by hospitals under prospective payment.

PPS Payments—Total Medicare spending for inpatient care is driven by payments per case and the number of cases. In 1984, the first year of PPS, the number of cases at hospitals under the new system fell by 6.3 percent, as providers responded to incentives to shift care to outpatient and other ambulatory settings (see Figure 3-2). Operating payments per case, however, rose by 18.5 percent.[21] As a result, total PPS operating payments grew by 11.1 percent. Over the next three years, continuing declines in the number of cases, combined with tight constraints on the growth of payments per case, led to relatively small increases in total PPS payments.

Since then, the trend in the number of cases and payments per case has been much more stable. From 1988 through 1992, the number of cases at PPS hospitals increased at an annual rate of 1.5 percent, while payments per case rose 6.0 percent per year. On average, total PPS payments grew at a yearly rate of 7.6 percent.

In the early 1990s, PPS payments began to decelerate, owing to a combination of restrained payment updates and smaller case-mix index increases. PPS payments per case went up only 3.8

Figure 3-2. Annual Change in PPS Payments and Cases, 1984-1995 (In Percent)

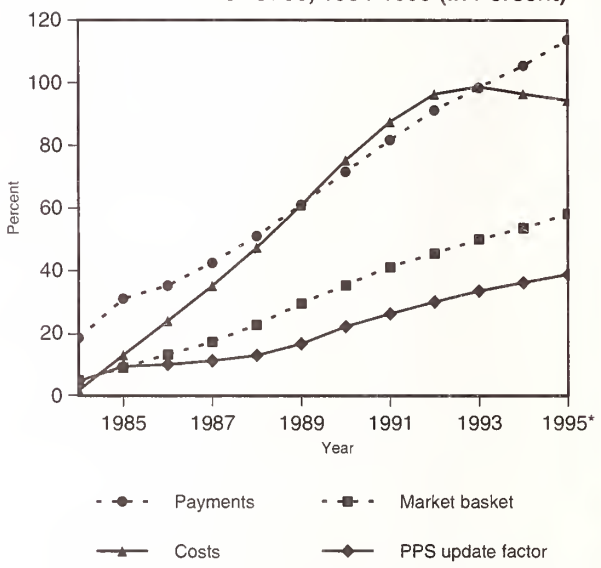


Note: Changes are for cohorts of hospitals having available cost reports for two consecutive years. Data correspond to each hospital's cost reporting period beginning during that Federal fiscal year. Excludes hospitals in Maryland; includes hospitals in Massachusetts and New York beginning with 1986 and New Jersey beginning with 1989.

* Based on preliminary data.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Admininstration.

Figure 3-3. Cumulative Increases in PPS Operating Payments and Costs Per Case, 1984-1995 (In Percent)



Note: The PPS market basket and update factor are for the corresponding Federal fiscal year. Payments and costs correspond to each hospital's cost reporting period beginning during that Federal fiscal year. Changes are for cohorts of hospitals having available cost reports for two consecutive years. Excludes hospitals in Maryland; includes hospitals in Massachusetts and New York beginning with 1986 and New Jersey beginning with 1989.

* Based on preliminary data.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

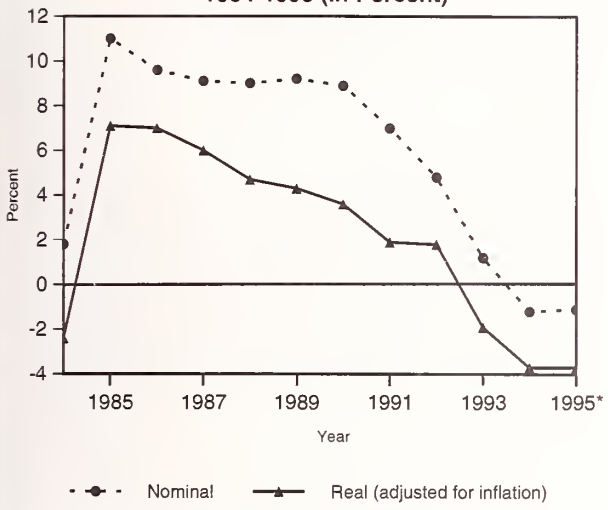
percent per year from 1993 through 1995—the smallest three-year rise since the beginning of PPS. Total PPS payments grew at an annual rate of 5.6 percent over this period.

Despite Medicare's better control over payments under PPS, the increase in payments per case from 1984 to 1995 was almost three times as great as the cumulative annual payment update factor (see Figure 3-3). Payments rose particularly rapidly relative to the update factor in the first two years of PPS. But even after this, payments per case continued to go up an average of 2.6 percentage points more than the update each year from 1986 through 1995. This growth was due primarily to CMI increases, but payment policy changes also contributed somewhat. The rise in per case payments from 1984 through 1995 was also almost twice the cumulative increase in the PPS hospital market basket index, which measures the change in input prices hospitals pay for goods and services they use.

PPS Costs—The trend in PPS costs has differed substantially from the pattern of payment increases. One reason is that, while PPS payment rates are explicitly determined by decisions made by or for the Medicare program, costs reflect providers' decisions about how to deliver services for all of their patients, not just those covered by Medicare.

After going up only 1.8 percent in 1984—reflecting hospitals' response to anticipated financial pressure from PPS—operating costs per case resumed their historically rapid growth (see Figure 3-4). From 1985 through 1991, per case operating costs rose at an annual rate of 9.1 percent—almost 50 percent faster than per case payments. In 1992, cost growth dropped to 4.8 percent. In 1993, costs per case edged up by only 1.2 percent, substantially less than during the first year of PPS and almost 2 percentage points below general inflation. In 1994 and 1995, per case costs actually declined, falling 1.2 percent and 1.1 percent, respectively, and almost 4 percentage points below inflation. Although the increase in PPS operating payments per case also had slowed, the drop in operating costs per case caused the cumulative trends in per case payments and costs to diverge.

Figure 3-4. Annual Change in Medicare Operating Costs Per Case, 1984-1995 (In Percent)

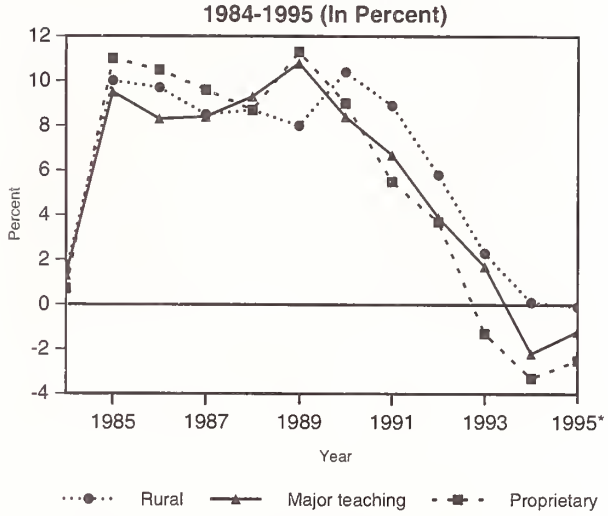


Note: Changes are for cohorts of hospitals having available cost reports for two consecutive years. Real change in operating cost per case is adjusted by the consumer price index for all urban consumers (CPI-U-X1). Data correspond to each hospital's cost reporting period beginning during that Federal fiscal year. Excludes hospitals in Maryland; includes hospitals in Massachusetts and New York beginning with 1986 and New Jersey beginning with 1989.

* Based on preliminary data.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

Figure 3-5. Annual Change in Medicare Operating Costs Per Case for Selected Hospital Groups, 1984-1995 (In Percent)



Note: Changes are for cohorts of hospitals having available cost reports for two consecutive years. Data correspond to each hospital's cost reporting period beginning during that Federal fiscal year. Excludes hospitals in Maryland; includes hospitals in Massachusetts and New York beginning with 1986 and New Jersey beginning with 1989.

* Based on preliminary data.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

The general pattern of cost growth has been remarkably similar across various hospital groups (see Figure 3-5). For example, rural, major teaching, and proprietary hospitals differ markedly in their missions, the services they offer, and the patients they treat. Yet all three groups had small increases in operating costs per case in 1984, much more rapid rises from 1985 through 1991, and sharply decelerating costs from 1992 through 1995. The extent to which costs rose or fell, though, was somewhat different across the groups. Proprietary hospitals, for example, have exhibited the steepest drop in cost growth in recent years. By contrast, rural hospitals' costs per case have climbed faster than the average for all hospitals. Nonetheless, they have controlled their costs more successfully in recent years than previously, with almost no increase in costs per case in 1994 and 1995.

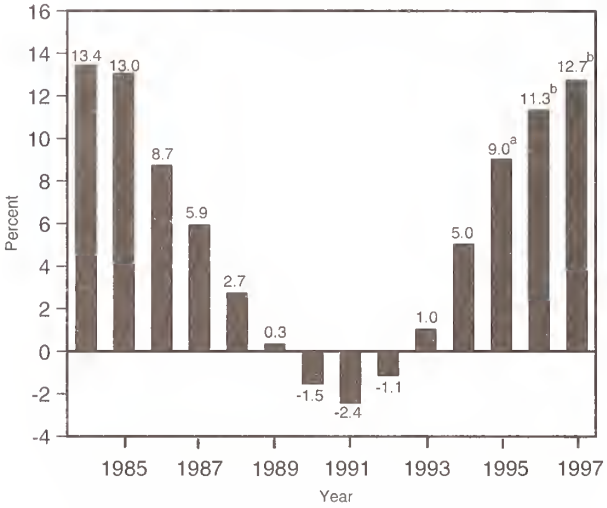
PPS Margins—The PPS inpatient margin compares PPS operating and capital payments with the corresponding Medicare-allowable inpatient costs. It is equal to the difference between PPS payments and costs as a percentage of payments. A positive margin therefore indicates that PPS payments exceed the operating and capital costs allocated to Medicare patients.

In 1995, the twelfth year of PPS, the aggregate PPS inpatient margin rose for the fourth consecutive year, to 9.0 percent—the highest level since 1985 (see Figure 3-6). That contrasts with the declining trend from 1984 to 1991, during which the PPS margin fell from 13.4 percent to –2.4 percent. The continued improvement in the PPS margin after 1991 is attributable to the substantial slowdown in hospital cost growth. ProPAC expects the PPS margin to be even higher—11.3 percent—in 1996, because PPS capital payments jumped in that year and operating payments increased faster than inflation while hospital cost growth remained low. Based on current information about payment and cost trends, ProPAC estimates that the PPS inpatient margin in 1997 will continue to climb to 12.7 percent.

Hospitals' Overall Financial Status

As with PPS margins, overall hospital financial performance depends on both revenues and costs.

Figure 3-6. Aggregate PPS Inpatient Margin, 1984-1997 (In Percent)



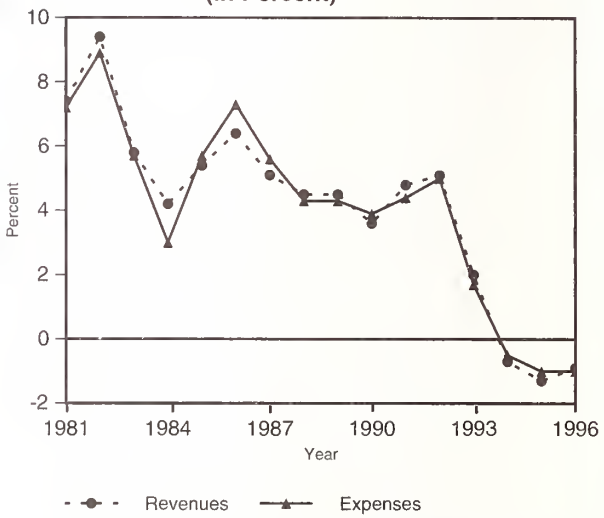
Note: Aggregate PPS inpatient margins reflect total hospital capital and operating payments. Data correspond to each hospital's cost reporting period beginning during that Federal fiscal year. Excludes hospitals in Maryland; includes hospitals in Massachusetts and New York beginning with 1986 and New Jersey beginning with 1989.

[a] Based on preliminary data.

[b] Estimated.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

Figure 3-7. Real Change in Total Hospital Expenses and Revenues Per Adjusted Admission, 1981-1996 (In Percent)



Note: Total hospital expenses and revenues are adjusted by the consumer price index for all urban consumers (CPI-U-X1). Adjusted admissions are an estimate of the total output hospitals produce, combining both admissions and outpatient visits.

SOURCE: ProPAC analysis of data from the American Hospital Association National Hospital Panel Survey.

Hospital revenue consists largely of payments received from third-party payers for inpatient and outpatient care. These payments come from public sources (chiefly Medicare and Medicaid) and from private payers. Small portions of revenue come directly from patients and from local governments in the form of operating subsidies. In addition, hospitals generate some funds through non-patient care activities such as gift shops, parking lot fees, and investments.

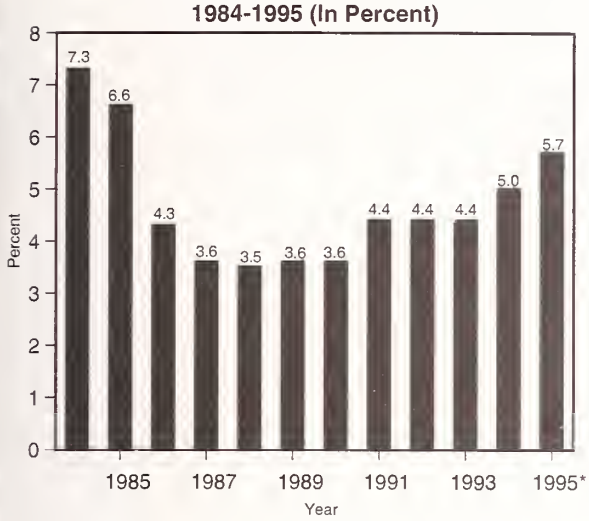
Trends in Total Revenues and Costs—Annual changes in hospital expenses and revenues plummeted in 1993, as pressures from public and private payers began to influence the hospital industry (see Figure 3-7). Both expenses and revenues per adjusted admission declined in real terms each year from 1994 through 1996. By contrast, they had grown at least 3.5 percentage points more than general inflation each year from 1985 to 1992.

Generally, per case revenue and cost growth have gone up within a few tenths of a percentage point of each other. Throughout the 1980s and early 1990s, hospitals usually were able to generate the revenues necessary to cover rapidly growing costs. The increase in revenues from 1994 through 1996, however, was the lowest in more than 20 years, and consistently below general inflation. Hospitals have lowered their costs in response to this revenue pressure.

Total Margins—The total hospital margin indicates the extent to which hospitals produce enough revenues to cover their expenses. It is the difference between total revenues and total expenses for any hospital or group of hospitals as a percentage of total revenues. Total expenses include spending for all inpatient and outpatient care, as well as for other activities. Total revenues include payments from all patients and their insurers, as well as receipts from non-patient sources. Because the total margin reflects revenues and costs from all sources, it is the best available measure of overall hospital financial status.

In 1984 and 1985, with PPS payments substantially exceeding costs, total margins were at record high levels (see Figure 3-8). As Medicare tightened its control over inpatient payment rate increases, the total margin fell. From 1987 through 1990, it was stable, leveling off at around 3.6 percent. In 1991, the total margin for all hospitals jumped to 4.4 percent, where it stayed through 1993.

Figure 3-8. Aggregate Total Hospital Margin, 1984-1995 (In Percent)

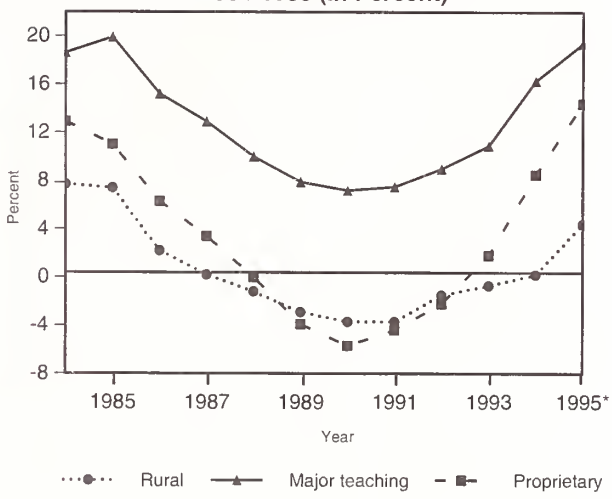


Note: Data correspond to each hospital's cost reporting period beginning during that Federal fiscal year. Excludes hospitals in Maryland; includes hospitals in Massachusetts and New York beginning with 1986 and New Jersey beginning with 1989.

* Based on preliminary data.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

Figure 3-9. Aggregate PPS Inpatient Margins for Selected Hospital Groups, 1984-1995 (In Percent)



Note: Data correspond to each hospital's cost reporting period beginning during that Federal fiscal year. Excludes hospitals in Maryland; includes hospitals in Massachusetts and New York beginning with 1986 and New Jersey beginning with 1989.

* Based on preliminary data.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

Over the next two years, the total hospital margin rose sharply. By 1995, it had reached 5.7 percent. Although it was lower than in 1984 and 1985, the total margin was much higher than at any time before PPS began.[22]

Variation in PPS and Total Margins Across Hospitals

While PPS and total margins for hospitals as a whole are improving, there are important differences in performance between and within groups.

Differences by Hospital Group—As described earlier, PPS inpatient margins were very high in the first two years of PPS, and then fell precipitously over the next several years. They began moving back up in 1991 and continued to increase through 1995. This pattern is reflected across groups of hospitals as well (see Figure 3-9).

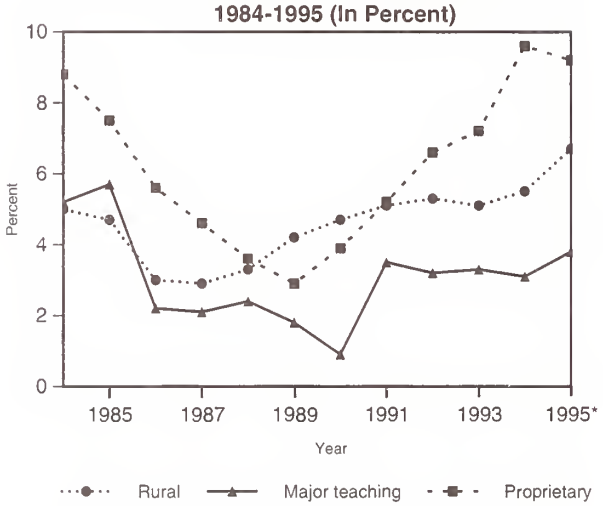
Major teaching hospitals had the highest aggregate PPS margin of any hospital group, 19.4 percent in 1995. That margin was their highest in a decade. The gap between the PPS margin for major teaching hospitals and the margin for all hospitals combined has widened over time.

Rural hospitals have tended to have lower PPS margins than their urban counterparts since PPS began, despite a succession of policy changes intended to narrow that difference. Nonetheless, rural hospitals also are performing considerably better under PPS in recent years, with their PPS margin rising from –3.7 percent in 1991 to 4.4 percent in 1995.

Proprietary hospitals show a similar pattern in their aggregate PPS margin, but the changes over time have been much greater. The PPS margin for this group fell from 12.9 percent in 1984 to –5.7 percent in 1990, a drop of 18.6 percentage points. At that point, the margin for proprietary hospitals was 7 percentage points below the figure for all hospitals combined. During the subsequent five years, however, that margin climbed to 14.4 percent, an increase of 20.1 percentage points. Proprietary hospitals had a PPS margin 5 percentage points higher than all hospitals combined in 1995.

The pattern of total margins across hospital groups shows a different picture (see Figure 3-10). The general trend of relatively high margins during the first year of PPS followed by several years of

Figure 3-10. Aggregate Total Margins for Selected Hospital Groups, 1984-1995 (In Percent)



Note: Data correspond to each hospital's cost reporting period beginning during that Federal fiscal year. Excludes hospitals in Maryland; includes hospitals in Massachusetts and New York beginning with 1986 and New Jersey beginning with 1989.

* Based on preliminary data.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

falling margins and then rising margins holds across groups. However, the relative performance of different types of hospitals varies substantially.

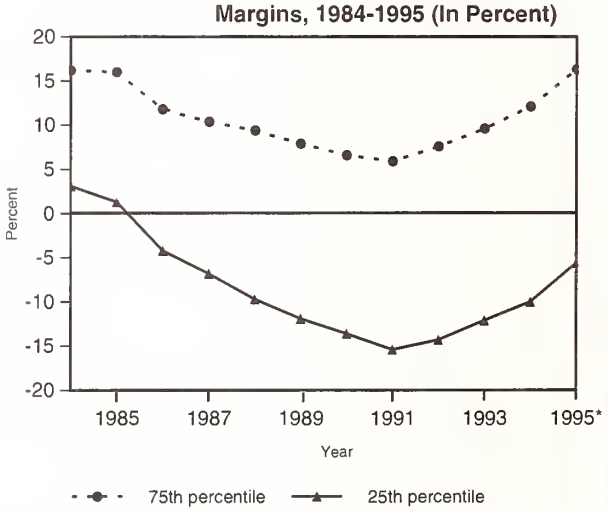
Major teaching hospitals, for instance, while having the highest PPS margin of any hospital group, generally have had the lowest total margin. In 1995, their aggregate total margin was 3.8 percent, almost 2 percentage points less than for all hospitals combined. Nevertheless, that margin was the highest it has been since 1985, and substantially greater than its 1990 level of 0.9 percent.

Among rural hospitals, the trend in total margins also has been different than the pattern of PPS margins. Although they consistently have had lower PPS margins than their urban counterparts, rural hospitals have had a higher total margin each year since 1989. The total margin for rural hospitals climbed to 6.7 percent in 1995, its highest level since PPS began.

In contrast to major teaching and rural hospitals, proprietary hospitals have had similar trends in their PPS and total margins. In 1984, with a total margin of 8.8 percent, proprietary hospitals were outpacing nearly all other hospital groups. But by 1989, their total margin had dropped to 2.9 percent, less than that for all hospitals combined. The total margin for this group then climbed rapidly, to 9.6 percent in 1994, an increase of 6.7 percentage points in five years. The total margin of 9.2 percent in 1995 still was 3.5 percentage points above that for all hospitals combined.

Variability Within Groups—Both PPS and total margins vary widely across individual hospitals. The range of PPS inpatient margins has grown substantially since the start of prospective payment. In 1984, half of all PPS hospitals had margins between 3.1 percent and 16.2 percent, a spread of about 13 percentage points (see Figure 3-11). By 1991, when the PPS margin for all hospitals combined was at its lowest point, the gap between the highest and lowest margins had widened to 21 percentage points; moreover, the hospitals with the lowest margins were much worse off relative to those with the highest ones. Between 1991 and 1995, the distribution of PPS margins stabilized, with both the bottom and the top increasing by about 10 percentage points. In 1995, 36 percent of hospitals had negative PPS margins, the lowest percentage since 1986 (see Table 3-5). An even larger proportion of hospitals, 39 percent, had PPS margins exceeding 10 percent.

Figure 3-11. Distribution of PPS Inpatient Margins, 1984-1995 (In Percent)



Note: Data correspond to each hospital's cost reporting period beginning during that Federal fiscal year. Excludes hospitals in Maryland; includes hospitals in Massachusetts and New York beginning with 1986 and New Jersey beginning with 1989.

* Based on preliminary data.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

Table 3-5. Distribution of PPS Inpatient and Total Hospital Margins, by Hospital Group, 1995 (In Percent)

Hospital Group	PPS Inpatient Margins			Total Hospital Margins		
		Percentage With:			Percentage With:	
	Median	Margin Over 10 Percent	Negative Margin	Median	Margin Over 10 Percent	Negative Margin
All hospitals	5.7%	39.1%	36.4%	4.5%	18.7%	20.4%
Urban	6.8	41.9	33.6	4.6	19.4	19.0
Rural	4.1	35.7	39.7	4.4	17.8	22.1
Large urban	8.9	46.6	29.9	4.0	16.4	20.7
Other urban	4.6	35.9	38.3	5.2	23.1	16.9
Rural referral	3.9	28.7	38.6	8.3	33.7	3.0
Sole community	7.1	43.3	33.9	4.9	18.0	19.1
Other rural	3.1	32.9	42.4	3.8	16.2	25.1
Major teaching	19.7	80.1	6.8	2.8	10.9	18.4
Other teaching	7.7	43.2	30.2	5.0	18.3	17.4
Non-teaching	4.4	36.0	39.2	4.5	19.2	21.0
DSH:						
Large urban	14.5	63.7	16.6	3.5	14.9	22.6
Other urban	7.4	43.1	30.1	6.0	27.3	13.2
Rural	7.6	46.6	30.2	5.2	23.1	17.2
Non-DSH	2.9	31.1	43.5	4.3	17.1	21.8
Teaching and DSH	13.7	62.2	16.7	3.9	15.1	18.9
Teaching only	3.8	33.5	39.0	5.1	19.3	15.3
DSH only	8.4	47.4	28.6	5.2	24.2	17.6
No teaching or DSH	2.7	30.8	44.1	4.2	16.9	22.6
Voluntary	4.7	35.5	37.4	4.4	15.8	17.4
Proprietary	14.2	60.0	24.3	6.9	37.8	23.4
Urban government	7.5	44.4	34.0	4.4	14.8	23.4
Rural government	3.5	34.4	41.3	4.1	16.4	25.0

Note: Based on preliminary data. Excludes hospitals in Maryland. DSH = disproportionate share.

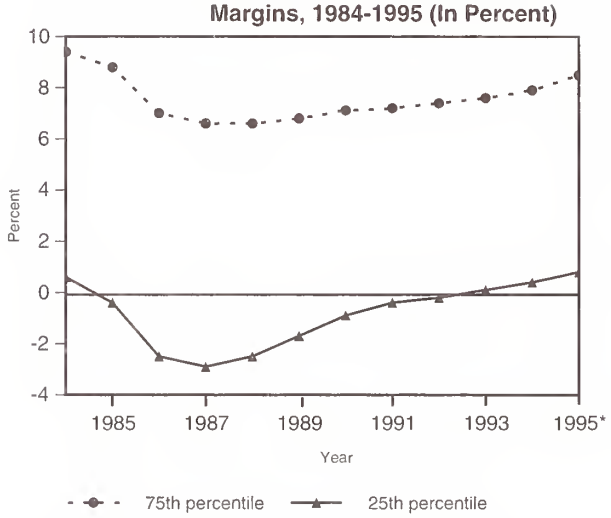
SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

The distribution of total margins has actually narrowed in recent years, after widening in the early years of PPS (see Figure 3-12). In 1984, total margins for half of all PPS hospitals were between 0.6 percent and 9.4 percent, a spread of about 9 percentage points. By 1987, the gap between the hospitals with the highest and lowest total margins was at its widest, as half of all hospitals had total margins between –2.9 percent and 6.7 percent, a spread of almost 10 percentage points. This discrepancy held at a little below 8 percentage points from 1991 through 1995, with the lowest margins increasing somewhat faster than the highest ones. Of all PPS hospitals, 20 percent had negative total margins in 1995, the lowest proportion since PPS began.

Medicare payments for teaching and disproportionate share hospitals help to raise PPS margins for these facilities. In 1995, four-fifths of major teaching hospitals had PPS margins surpassing 10 percent, while only 7 percent had negative PPS margins. Similarly, hospitals receiving Medicare DSH payments were more likely than other hospitals to have PPS margins over 10 percent and less likely to have negative PPS margins.

Although these hospitals have high PPS margins, their overall financial performance is generally worse than that of other groups. Only 11 percent of major teaching hospitals, for instance, had total margins above 10 percent. These hospitals, though, were somewhat less likely than average to have had

Figure 3-12. Distribution of Total Hospital Margins, 1984-1995 (In Percent)



Note: Data correspond to each hospital's cost reporting period beginning during that Federal fiscal year. Excludes hospitals in Maryland; includes hospitals in Massachusetts and New York beginning with 1986 and New Jersey beginning with 1989.

* Based on preliminary data.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

negative total margins. An above-average share of DSH hospitals located in large cities had negative total margins, although the opposite was true for other urban and rural DSH hospitals.

Among rural referral centers, a higher than average proportion had negative PPS margins and fewer than average had extremely high PPS margins. However, this group had the smallest share with negative total margins and the largest share with total margins above 10 percent.

The financial performance of hospitals that do not receive special payments differs from those that do. An above-average proportion of these non-teaching, non-DSH hospitals had negative PPS margins, for instance. Other rural hospitals (those not designated as sole community providers or as rural referral centers) were in a similar situation. Hospitals in each of these groups also were more likely to have negative total margins.

Proprietary hospitals were similar to teaching and DSH hospitals in that a relatively high percentage had PPS margins above 10 percent. Proprietary hospitals had a wide spread in overall hospital financial performance, however, including above-average shares of facilities with negative total margins and with total margins exceeding 10 percent. By comparison, the variation in total margins was much less for voluntary hospitals.

THE CHANGING HOSPITAL MARKET

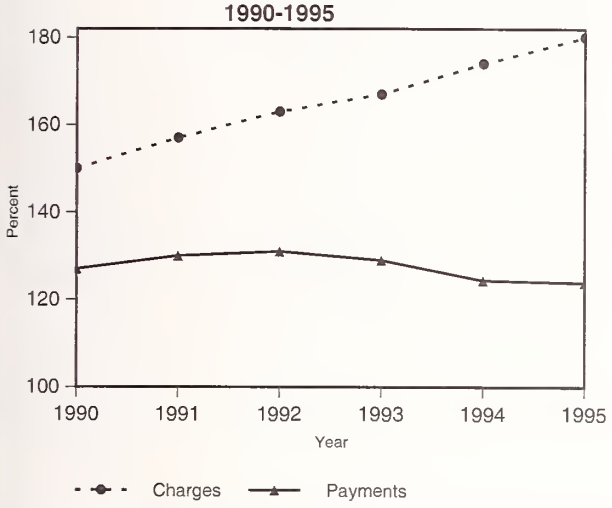
Changes in medical technology and practice patterns, along with the growth of managed care, have increased competitive pressures on hospitals and dramatically slowed their revenue growth. Nevertheless, most hospitals have improved their financial performance. This improvement has largely come about because hospitals have cut costs and reorganized delivery in response to market forces.

Forces Affecting the Business Environment

As technology and medical practices have changed, providers have been able to shift some services or entire episodes of inpatient care to ambulatory and post-acute care settings. This trend has fragmented care and encouraged the proliferation of providers competing to deliver medical services formerly furnished only in the hospital inpatient setting. The number of non-hospital providers like ambulatory surgical centers, free-standing radiology centers, and skilled nursing facilities has grown rapidly. As these other providers have expanded their range of services, inpatient acute care admissions have dropped. Consequently, many hospitals carry excess capacity in staff, plant, and equipment, which increases costs per case and may put hospitals at a price disadvantage relative to other providers.

Managed care is another major factor shaping the business environment in which hospitals operate. Increased enrollment in these plans has constrained hospital revenues, as plans avert inpatient admissions and shorten stays when appropriate care is available in less expensive settings. That has reinforced the shift away from inpatient care, reducing revenues from hospitals' core business. Further, because plans can require or influence their members to use specific hospitals, plans often have leverage to negotiate substantial payment discounts. The widening gap between high hospital charges and much lower actual payments indicates that discounts from charges and negotiated rates are increasingly prevalent throughout the industry (see Figure 3-13). As a result, there has been a falloff in real (inflation-adjusted) inpatient revenues per admission since 1994 and in outpatient revenues per visit since 1995 (see Figure 3-14).

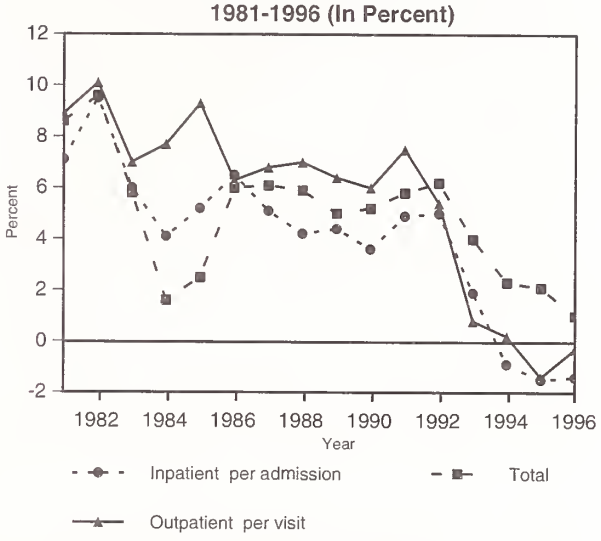
Figure 3-13. Private Payer Hospital Charges and Payments as a Percentage of Private Payer Costs, 1990-1995



Note: Due to reporting inconsistencies related to Medicaid disproportionate share hospital payments and provider-specific taxes, data for 1992 and 1993 include significant margins of error.

SOURCE: ProPAC analysis of data from the American Hospital Association Annual Survey of Hospitals.

Figure 3-14. Real Change in Hospital Revenue, by Type of Service, 1981-1996 (In Percent)



Note: Real change in revenues is adjusted by the consumer price index for all urban consumers (CPI-U-X1).

SOURCE: ProPAC analysis of data from the American Hospital Association National Hospital Panel Survey.

While the growth of managed care has not been uniform nationwide, the vast majority of hospitals have been exposed to it. In 1995, 87 percent of all community hospitals had at least one contract with a health maintenance organization (HMO) or preferred provider organization (PPO), compared with only 62 percent in 1990 (see Table 3-6). Over 90 percent of hospitals in metropolitan areas with more than 100,000 people contracted with an HMO or a PPO in 1995. The proportion of rural hospitals contracting with managed care entities also has grown rapidly to 78 percent in 1995, up from only 40 percent in 1990.

Hospitals lacking arrangements with HMOs or PPOs may nevertheless participate in other systems

Table 3-6. Health Maintenance Organization and Preferred Provider Organization Contracts, by Hospital Category, 1990 and 1995 (In Percent)

	Any HMO		Any PPO		HMO or PPO	
Hospital Category	1990	1995	1990	1995	1990	1995
All Community	47.3%	70.3%	52.4%	79.9%	61.9%	86.7%
MSA size						
2,500,000+	78.4	89.9	68.9	88.0	83.7	93.5
2,499,999-1,000,000	81.8	91.2	79.1	90.3	87.4	94.7
999,999-500,000	78.1	90.5	75.2	90.5	85.9	94.6
499,999-250,000	68.8	85.7	72.4	90.9	83.7	94.5
249,999-100,000	48.7	73.8	59.9	88.0	70.0	91.5
Below 100,000	29.9	64.9	43.3	81.1	55.2	83.8
Non-MSA	21.1	49.1	32.1	72.4	40.0	77.8
Voluntary	56.7	74.4	56.6	82.8	68.8	88.2
Proprietary	46.6	75.6	63.9	88.6	67.9	90.8
Government	27.2	52.1	38.4	74.1	44.5	78.5

Note: HMO = health maintenance organization. PPO = preferred provider organization. MSA = metropolitan statistical area.

SOURCE: ProPAC analysis of data from the American Hospital Association Annual Survey of Hospitals.

of care in which an insurer or a self-insured employer directs its members to specific providers for service at negotiated rates. Further, even insurers that do not offer managed care options employ methods like prospective payment to control spending on hospital services.

Payer Mix

A hospital's mix of funding sources for patient care affects the financial pressure it faces. Hospitals have typically relied on higher payments from private insurers to offset losses from uncompensated care, as well as from treating Medicare and Medicaid patients. Despite the shift toward managed care, hospitals with a higher proportion of privately insured patients generally show better financial performance.

The mix of patients by payer varies widely among hospitals. In aggregate, private-pay patients accounted for 36 percent of hospitals' total costs in 1995 (see Table 3-7). For urban hospitals with a large share of poor patients (representing more than 45 percent of total costs), private-pay patients accounted for only 9 percent of total costs, whereas Medicare, Medicaid, and uncompensated care together accounted for 80 percent.[23] By contrast, private-pay patients represented 42 percent of costs for urban hospitals with a small share of poor patients (below 25 percent), while Medicare, Medicaid, and uncompensated care accounted for 55 percent.

The effects of variations in payer mix are reflected in hospitals' overall gains and losses, which

Table 3-7. Distribution of Hospital Costs, by Payer and Hospital Group, 1995 (In Percent)

Hospital Group	Medicare	Medicaid	Other Government Payers	Private Payers	Uncompensated Care	Non-Patient Care
All community	39.1%	14.7%	1.6%	35.8%	6.1%	2.7%
Urban	38.7	14.4	1.7	36.2	6.3	2.8
Rural	46.5	13.1	1.0	32.6	5.0	1.8
Major teaching						
Public	18.6	36.9	7.7	14.7	18.4	3.7
Private	33.7	16.1	1.0	38.8	5.6	4.8
Other teaching						
Public	32.3	22.7	6.0	22.9	12.5	3.6
Private	42.7	10.4	0.8	39.2	4.3	2.4
Non-teaching						
Public	44.7	13.0	1.4	32.8	6.3	1.7
Private	45.1	10.5	0.9	37.3	4.5	1.7
Voluntary	40.6	12.5	0.9	38.6	4.6	2.9
Proprietary	44.1	12.2	0.9	37.7	4.1	1.0
Urban government	26.4	28.7	6.0	21.1	14.6	3.2
Rural government	46.8	13.9	0.9	30.8	5.8	1.8
Low-income patient cost share:						
Urban						
> 45	17.8	42.2	7.6	8.8	20.2	3.4
25-45	35.3	20.6	1.8	32.8	6.5	3.0
< 25	42.9	8.2	0.7	41.6	3.9	2.6
Rural						
> 45	39.5	32.2	0.8	18.1	8.0	1.4
25-45	44.9	17.8	1.4	27.6	6.6	1.6
< 25	47.7	9.5	0.8	36.0	4.0	2.0

Note: Data reflect inpatient and outpatient services for community hospitals. Data for the all community hospital group were calculated using imputed values for missing data; all other values are for reported data only. Most Medicare and Medicaid managed care patients are included in the private payers category. Low-income patient cost share is the percentage of total hospital costs from uncompensated care, Medicaid, and Medicare Supplemental Security Income patients, plus losses attributable to state and local indigent care programs.

SOURCE: ProPAC analysis of data from the American Hospital Association Annual Survey of Hospitals.

measure differences between total revenues and total costs as a percentage of total costs.[24] Urban hospitals with a large share of poor patients posted total gains of only 1.4 percent on all operations, compared with 7.1 percent total gains for those with a small share of these patients (see Table 3-8).

In aggregate, hospitals had gains from treating private-pay patients of 8.5 percent. Medicare and Medicaid patients resulted in slight losses, and uncompensated care produced losses of 5.0 percent.[25] However, hospitals' falling real revenues suggest that private insurers—particularly managed care plans—may no longer be willing to accept increases in their rates to subsidize other payers and uncompensated care.

While having a large share of private-pay patients is favorable to hospitals' financial conditions, payment can vary within this class of payer. For example, some self-paying individuals pay full charges for all services they receive, indemnity insurers usually pay discounted rates, and managed care plans reimburse hospitals under a variety of methods. Because

Table 3-8. Hospital Gains and Losses, by Payer and Hospital Group, 1995 (In Percent)

	Gains or Losses as a Percentage of Total Costs							
Hospital Group	Total Gains	Medicare	Medicaid	Other Government Payers and Subsidies	Uncompensated Care	Private Payers	Non-Patient Care	Private Payer Payment to Cost Ratio
All community	6.0%	-0.3%	-0.9%	-0.1%	-5.0%	8.5%	3.7%	123.9%
Urban	6.1	-1.0	-1.3	-0.3	-5.3	10.3	3.7	128.3
Rural	7.1	-2.7	-1.5	0.4	-4.6	12.4	3.0	138.1
Major teaching								
Public	1.5	2.0	1.9	-3.4	-9.8	7.9	3.0	154.1
Private	3.7	0.0	-2.4	0.1	-5.4	6.8	4.6	117.6
Other teaching								
Public	7.0	-1.9	1.0	-0.5	-10.4	13.5	5.4	159.1
Private	7.0	-1.3	-1.4	0.0	-4.3	10.1	3.9	125.7
Non-teaching								
Public	6.3	-2.9	-1.7	0.3	-5.0	12.3	3.2	137.6
Private	7.8	-2.1	-1.5	0.2	-4.4	12.6	3.1	133.8
Voluntary	6.0	-1.6	-1.8	0.1	-4.5	9.9	3.9	125.6
Proprietary	14.4	1.4	-0.7	0.5	-4.1	15.9	1.4	142.2
Urban government	3.3	0.4	0.8	-2.1	-8.7	9.6	3.3	145.5
Rural government	6.2	-3.8	-1.5	0.8	-4.6	12.0	3.1	139.0
Low-income patient cost share:								
Urban								
> 45	1.4	2.2	1.6	-3.6	-12.7	10.3	3.6	217.0
25-45	5.3	0.5	-2.3	0.3	-5.9	9.3	3.4	128.5
< 25	7.1	-1.9	-1.5	0.1	-3.9	10.5	3.8	125.3
Rural								
> 45	4.5	-0.4	0.4	0.7	-6.6	7.3	3.1	140.5
25-45	6.7	-1.8	-1.3	0.4	-5.9	12.5	2.9	145.2
< 25	7.5	-3.3	-1.6	0.4	-3.8	12.6	3.1	135.1

Note: Gains and losses are the difference between the costs of providing care and the payments received, weighted by each payer's share of total costs. Data reflect inpatient and outpatient services for community hospitals. Data for the all community hospital group were calculated using imputed values for missing data; all other values are for reported data only. Most Medicare and Medicaid managed care patients are included in the private payers category. State and local subsidies are considered payment for uncompensated care, up to the level of each hospital's uncompensated care costs. Low-income patient cost share is the percentage of total hospital costs from uncompensated care, Medicaid, and Medicare Supplemental Security Income patients, plus losses attributable to state and local indigent care programs.

SOURCE: ProPAC analysis of data from the American Hospital Association Annual Survey of Hospitals.

plans generally can negotiate lower rates relative to indemnity insurers and self-paying individuals, having a larger share of managed care patients puts stronger payment pressure on a hospital.

Structural Changes in the Industry

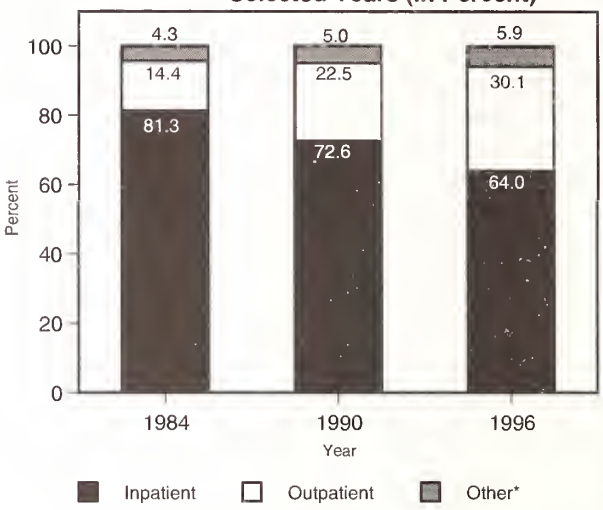
Faced with financial pressure from public and private payers, hospitals have attempted to increase revenues, decrease costs, and strengthen their negotiating positions with other providers and purchasers of care. Many hospitals have diversified, offering new products to boost revenue and become less dependent on the demand for a particular service. Others have pursued new organizational arrangements. Some, for instance, have integrated with other providers, either by contractual arrangement or acquisition, while still others have combined forces, forming alliances or actually merging with another institution.

Product Mix—In the 1980s, pressure from PPS and other factors discussed earlier lowered the demand for inpatient services. The resulting excess capacity encouraged hospitals to reduce costs and look to other sources for revenue. Resources like trained staff and physical plant that formerly were devoted to inpatient care became available for outpatient surgery, skilled nursing care, and other new products.

As a consequence, outpatient revenue rose to 30.1 percent of total hospital revenue in 1996 from 14.4 percent in 1984 (see Figure 3-15). Outpatient visits grew by 7.0 percent annually in the 1993-1996 period compared with inpatient admissions, which went up only 0.6 percent per year. Outpatient activity also includes a greater amount of ambulatory surgery, which jumped by 168 percent between 1983 and 1993, whereas inpatient surgery fell by 33 percent.[26] In addition, two-thirds of hospitals had skilled nursing units and half owned home health agencies in 1996 (see Table 3-9). This contrasts with 43 percent and 28 percent, respectively, in 1990. The percentage with psychiatric units is up as well, to 28 percent in 1996 from 20 percent in 1990.

Relationships With Other Providers—Another trend entails the purchase of physician practices by hospitals. They have concentrated on large practices: 9.4 percent of practices with 100 or more

Figure 3-15. Hospital Revenue, by Source, Selected Years (In Percent)



Note: Totals may not sum to 100 due to rounding.

* Includes non-patient revenues like cafeteria and gift shop.

SOURCE: American Hospital Association National Hospital Panel Survey.

physicians were hospital-owned in 1995. By contrast, only 2.0 percent of practices with three to 15 physicians were hospital-owned.[27] Fully 90 percent of all practices remain physician-owned, however, with only a very few owned by universities, insurance companies, and other organizations.

An increasing number of hospitals and physicians are developing physician-hospital organizations (PHOs). A PHO provides a structure that allows a hospital and its medical staff to negotiate with managed care organizations, thus enhancing the hospital's bargaining power. Like insurer-sponsored health care plans, PHOs can contract directly with payers. By 1995, 26.3 percent of hospitals were involved in PHOs, compared with 6.2 percent in 1993.[28]

Table 3-9. Short-Term Hospitals With Selected Providers, 1990 and 1996 (In Percent)

Provider Type	1990	1996
Psychiatric unit	20.4%	28.2%
Rehabilitation unit	12.3	16.6
Skilled nursing unit*	43.2	66.8
Home health agency	27.9	50.0
Hospice	5.0	10.1

* Includes hospitals with swing beds.

SOURCE: ProPAC analysis of data from the Health Care Financing Administration, Office of Survey and Certification.

Hospital ownership of managed care organizations is also spreading. These entities allow hospitals to negotiate directly with purchasers of insurance coverage. By replacing insurer-owned plans with their own, hospitals potentially can increase revenue as well as strengthen their negotiating positions with other providers. In 1995, 7.7 percent of hospitals owned and operated their own HMO, compared with 5.1 percent in 1993. The proportion of hospitals operating PPOs increased even more rapidly. By 1995, 17.1 percent of hospitals owned and operated their own PPOs, up from 9.8 percent in 1993.[29]

Relationships Among Hospitals—Historically, the hospital industry has consisted mainly of independent nonprofit facilities. Changes in health care financing and practice patterns are altering that picture. Regional hospital systems and national for-profit companies are acquiring independent nonprofit hospitals. The number of such transactions went from 20 in 1994 to 34 in 1995 and 31 in 1996. Pressures from managed care organizations that have led to fewer private-pay admissions, shortened stays, and reduced occupancy have made the market even less favorable for independent facilities.

Many hospitals have responded to these changes by affiliating with other hospitals. In 1995, 44.1 percent were members of multihospital systems, up from 37.4 percent in 1993. Over the same period, the proportion of hospitals reporting membership in a network increased from 12.5 percent to 27.8 percent. The share of hospitals in alliances, a looser form of affiliation, grew from 28.7 percent in 1993 to 32.0 percent in 1995.[30]

Some hospitals have gone further, consolidating with other hospitals. Consolidations, which include ownership changes like mergers, have increased sharply in the last three years. In 1994, 92 consolidations were announced; in 1995, there were 133 and in 1996 there were 165.[31] Most of the increase has been among nonprofit hospitals.

The characteristics of the hospitals involved in consolidations have changed. From 1994 through 1996, hospitals with 100 to 200 beds constituted the largest single group of consolidations. The most rapid growth, however, was in the proportion of consolidations involving hospitals with 50 or fewer beds or with 301 to 400 beds.

The geographic distribution of consolidating hospitals has also changed. In 1994, most consolidations were for hospitals in the South (South Atlantic, East South Central, and West South Central states). Fewer than 5 percent were in the Northeast (New England and Middle Atlantic states). In 1996, the South and the Northeast each accounted for a third of the announced consolidations.

Ownership changes take several forms. Facilities may merge, replacing several independent hospitals with a single legal entity. The new entity may operate a hospital at a single physical location or may continue operating separate facilities at multiple sites. The parties may also establish a single holding company that owns the assets of the participating hospitals.

Contractual arrangements often transfer control to a single entity. A hospital may establish a partnership with a chain or another single hospital, with one partner in control. In a lease arrangement, one hospital may enter a long-term agreement to control another. Health care organizations are developing additional contractual arrangements to transfer control without formally merging.[32]

FACTORS AFFECTING HOSPITALS' COSTS

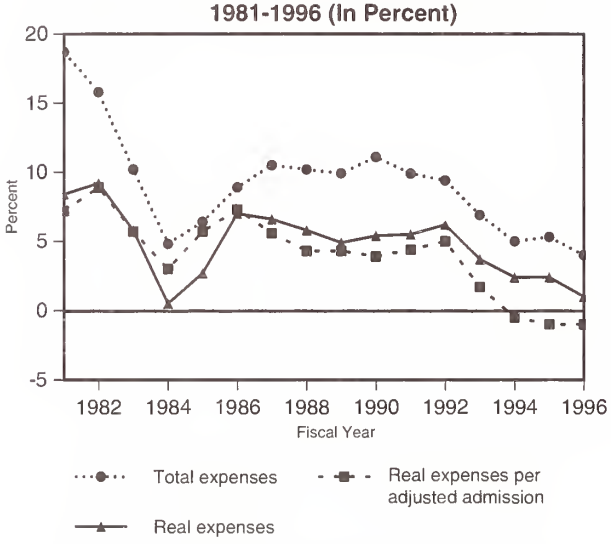
Aided by changes in organization and ownership, hospitals have dramatically slowed their cost growth. Real increases in total expenses (adjusted to remove the effects of general inflation) have been smaller each year since 1992, reaching 1.0 percent in 1996 (see Figure 3-16). Real expenses per adjusted admission (a measure of cost per unit of output) actually have fallen in each of the last three years.[33]

This slowdown is partly due to changes in the volume and mix of services hospitals furnish. It also reflects declines in the quantity of inputs like labor and supplies that hospitals use to produce services, as well as improvements in productivity. Finally, hospitals have been able to restrain increases in labor compensation below those for workers in other sectors of the economy.

Volume and Mix of Services

Changes in the number and mix of admissions, outpatient visits, and other services may affect hospital

Figure 3-16. Growth in Hospital Expenses, 1981-1996 (In Percent)



Note: Real expenses are adjusted by the consumer price index for all urban consumers (CPI-U-X1). Adjusted admissions are an estimate of the total output hospitals produce, combining both admissions and outpatient visits.

SOURCE: ProPAC analysis of data from the American Hospital Association National Hospital Panel Survey.

cost growth. Other things equal, total costs generally increase as volume rises and decrease when it falls. Costs per unit, however, usually grow less rapidly when volume is rising (because hospitals use resources more efficiently), but accelerate when output declines. Changes in the mix of services also may influence per unit cost growth through their effects on average service complexity.

As indicated by adjusted admissions, the total volume of hospital services has been growing 2.6 percent annually since 1993 (see Table 3-10). The mix of services also has changed as hospitals provide less inpatient care and more outpatient visits. This suggests that some of the recent slowdown in hospital cost growth may have resulted from a decline in the overall average complexity of hospital services.

Either inpatient admissions (both acute and post-acute), average length of stay, or both have dropped each year since 1983. Consequently, total inpatient days generally have been falling. This trend has accelerated recently, due to a sharp dip in average length of stay, with inpatient days declining 3 percent annually from 1993 to 1996. Moreover, the falloff in total inpatient volume has occurred despite continuing growth in admissions to hospital-based rehabilitation units and skilled nursing facilities.

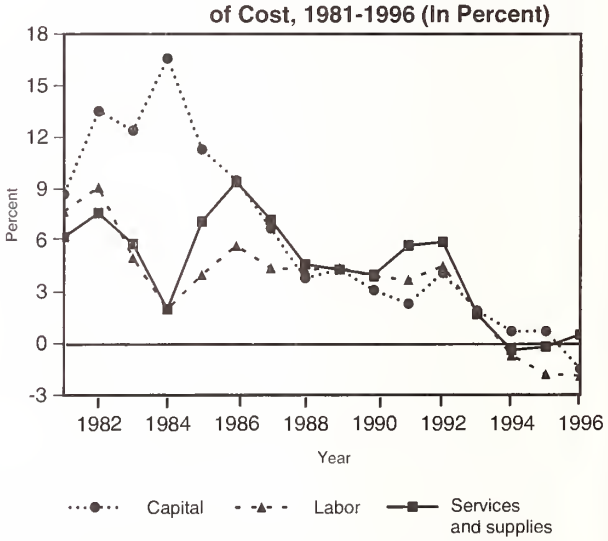
At the same time, hospital outpatient visits have continued to rise steeply, growing an average of 7 percent annually since 1993. In general, the services furnished during an outpatient visit are less complex (and thus less costly) than those provided during an inpatient stay. Therefore, the expansion of outpatient volume may have contributed to the slowdown in the growth of costs per adjusted admission.

Slower growth in resource use is also indicated by recent trends in costs per unit of service for the types of inputs hospitals employ (see Figure 3-17). Real annual changes in input costs per adjusted admission generally have been dropping since 1992 for all inputs, including labor, services and supplies, and capital assets. From 1994 to 1996, real resource use has grown little or declined, suggesting that hospitals have been using the same or fewer resources of all types, even as overall service volume has increased.

Changes in Hospital Employment

Labor costs—spending for salaries, wages, and employee benefits—account for more than half of hospital operating expenses. Because these expenses make up such a large share of hospital costs, changes

Figure 3-17. Real Growth in Hospital Costs Per Adjusted Admission, by Type of Cost, 1981-1996 (In Percent)



Note: Real costs are adjusted by the consumer price index for all urban consumers (CPI-U-X1). Adjusted admissions are an estimate of the total output hospitals produce combining both admissions and outpatient visits.

SOURCE: ProPAC analysis of data from the American Hospital Association National Hospital Panel Survey.

Table 3-10. Hospital Use, Beds, and Occupancy, 1981-1996

Year	Change in Admissions	Length of Stay (In Days)	Change in Inpatient Days	Change in Beds	Occupancy Rate	Change in Outpatient Visits	Change in Adjusted Admissions
1981	0.9%	7.2	1.2%	1.7%	75.8%	1.4%	1.1%
1982	0.0	7.2	-0.6	1.1	74.5	1.1	0.3
1983	-0.5	7.0	-2.5	0.6	72.2	2.8	0.0
1984	-3.7	6.7	-8.6	1.1	66.7	1.4	-2.5
1985	-4.9	6.5	-6.5	-1.8	63.6	4.5	-2.8
1986	-2.1	6.6	-1.4	-1.2	63.4	8.3	-0.3
1987	-0.6	6.6	0.2	-0.9	64.1	5.8	0.9
1988	-0.4	6.6	-0.5	-1.3	64.6	6.2	1.4
1989	-1.0	6.6	-0.9	-1.3	64.9	4.0	0.5
1990	-0.5	6.6	-1.6	-0.9	64.5	6.0	1.5
1991	-1.1	6.5	-2.5	-1.0	63.5	5.4	1.1
1992	-0.8	6.4	-2.4	-0.5	62.3	6.4	1.1
1993	0.7	6.2	-2.1	-0.7	61.4	6.5	2.0
1994	0.9	6.0	-2.9	-1.2	60.3	7.0	2.9
1995	1.4	5.7	-2.9	-1.8	59.7	8.3	3.5
1996	-0.4	5.5	-3.6	-2.4	58.7	6.4	2.0
Averages							
1981-1983	0.1	7.1	-0.6	1.1	74.2	1.8	0.5
1984-1992	-1.7	6.6	-2.7	-1.1	64.2	5.3	0.1
1993-1996	0.6	5.9	-3.0	-1.5	60.0	7.0	2.6

Note: Adjusted admissions are an estimate of the total output hospitals produce, combining both admissions and outpatient visits.

SOURCE: American Hospital Association National Hospital Panel Survey.

in the number of employees, compensation rates, and skill mix can substantially affect hospitals' costs.

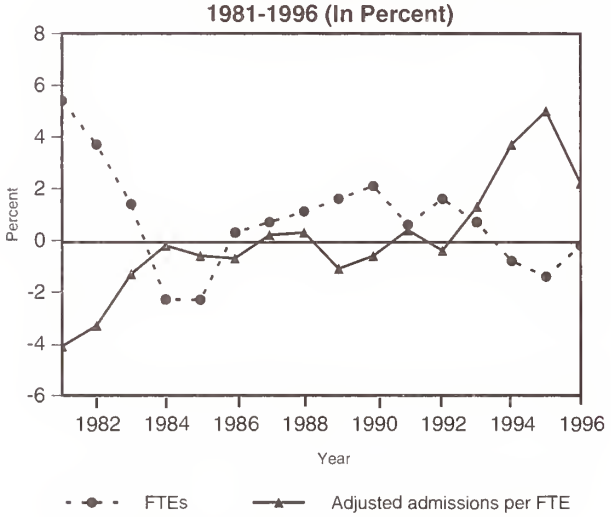
Since 1994, hospitals have been reducing the size of their work force (see Figure 3-18). The decline in total employment has been simultaneous with an upswing in adjusted admissions. Thus, the number of adjusted admissions per FTE has been rising, indicating that hospitals may have substantially improved labor productivity.[34]

In addition to downsizing, hospitals have restrained annual increases in employee wages. Before 1993, the average increase in hospital workers' earnings exceeded that for all civilian workers at least as far back as 1987, when comparable data first became available (see Figure 3-19). Since 1993, however, hospital wage increases have lagged behind those for all workers. This gap widened in 1996, as hospital worker earnings went up by only 1.8 percent, compared with 2.9 percent for all civilian workers.[35]

Throughout much of the 1980s and early 1990s, hospitals shifted to a more skilled staff. Although such a move generally raises labor costs per FTE, substitution of costlier workers may enhance hospital productivity if these employees can complete tasks faster or use fewer inputs. Anecdotal evidence suggests that this pattern may be changing. Hospitals have begun to replace licensed practical nurses (LPNs) with unlicensed aides. Although registered nurses (RNs) accounted for basically the same share of total staff as in 1990 (24 percent), the number of LPNs has fallen. In 1995, there were 6.1 RNs for every LPN, compared with only 4.7 in 1990. Consequently, RNs make up an increasing proportion of professional nursing staff.

While hospitals seem to have made substantial gains in labor productivity, some of the improvement may be due to changes in the services being provided rather than greater efficiency. For instance, many patients receive fewer days of acute inpatient care, followed by several days in a less-costly post-acute care unit. Further, patient amenities may have diminished as well.

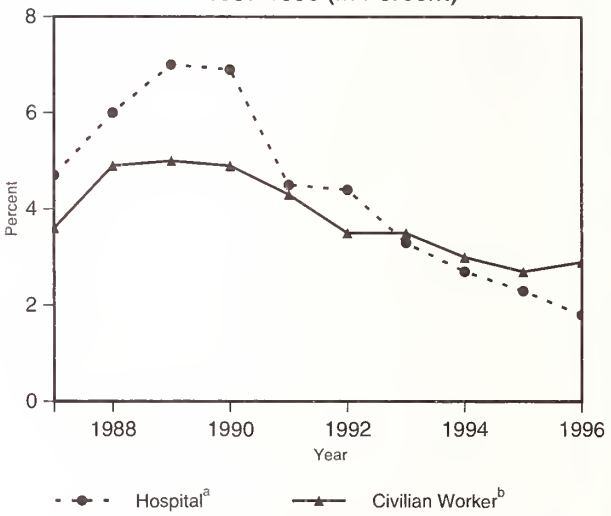
Figure 3-18. Change in Hospital Employment and Labor Productivity, 1981-1996 (In Percent)



Note: Adjusted admissions per FTE measures labor productivity. Adjusted admissions are an estimate of the total output hospitals produce, combining both admissions and outpatient visits. FTE = full-time equivalent.

SOURCE: ProPAC analysis of data from the American Hospital Association National Hospital Panel Survey.

Figure 3-19. Change in Hospital and Civilian Worker Compensation, 1987-1996 (In Percent)



Note: All changes are from the index level at the previous year's end. Compensation includes wages and benefits.

[a] Based on employment cost index compensation series for civilian hospital workers.

[b] Based on employment cost index compensation series for all civilian workers.

SOURCE: Bureau of Labor Statistics.

Costs of Capital, Services, and Supplies

Hospitals use three broad types of nonlabor inputs: capital assets, supplies, and services. Capital assets include buildings, fixtures like elevators and heating and cooling systems, and movable equipment such as portable X-ray machines and hospital beds. The costs associated with such assets are measured as interest on funds borrowed to purchase them and by depreciation. Capital accounted for about 8 percent of total hospital costs in 1996.

Supplies encompass a broad assortment of items ranging from intravenous fluids and needles to rubber gloves and paper. Services, which normally are considered together with supplies, may include insurance, medical equipment maintenance, temporary nurse staffing, and the operation of entire departments by outside contractors. In 1996, about 39 percent of hospital costs were for supplies and services.

Real costs per adjusted admission for supplies and services have generally risen at about the same rate as real per unit labor costs. The trend in real capital costs per unit also has been similar to that for labor since the mid-1980s (see Figure 3-17). As noted earlier, hospitals succeeded in slowing the growth of real unit costs for all inputs beginning in 1992. This slowdown is unprecedented since these cost data first became available in 1976.

EFFECT OF STRUCTURAL CHANGES ON OTHER MISSIONS

The growing financial pressures hospitals are experiencing may be felt most keenly by those that perform certain specialized missions historically supported largely by patient care revenues. Among these missions are teaching, unsponsored research, indigent care, and providing high-cost specialized services like the most acute level of trauma care and neonatal intensive care.[36] Such activities are highly concentrated among a relatively small number of hospitals.

Hospitals that carry out these missions rely on a patchwork of funding. Medicare, for instance, provides support through its teaching and disproportionate share payments. Medicaid programs in many states also help explicitly fund these missions, but policies vary among states. In many localities, uncompensated care pools or direct subsidies from state and local governments are used to

assist hospitals with large uncompensated care burdens. Private payers generally have provided implicit support, with hospitals using patient care payments in excess of costs for these activities.

As private insurers become more sensitive to the prices they pay—and as Medicare and Medicaid policies are changed—funding for some of these special missions is likely to become more vulnerable. Hospitals either will need to find additional sources of support or cut back on the resources they devote to these activities. Scaling them back, however, could jeopardize important benefits to the community, as well as needed care for specific patient groups.

Teaching, Research, and Specialized Care

Teaching hospitals offer services that are highly valued by society. As the sponsoring site for thousands of medical students and residents, they help to ensure a well-trained physician work force for the future. Some play a prominent role in the development of medical technologies and in biomedical research. Many are also critical in providing care to the poor. In addition, teaching hospitals are often among the few sites where patients can obtain high-cost specialized services.

In carrying out these missions, teaching hospitals incur added costs. As managed care grows and as other insurers become more cost conscious, teaching hospitals have to compete on price to attract patients. But their higher costs place them at a competitive disadvantage compared with providers that do not have these additional responsibilities.

Although there are more than 1,000 teaching hospitals, a large proportion of residents are concentrated in academic medical centers (AMCs), which are hospitals owned by a medical school or those where most chiefs of clinical service also chair a medical school department. While AMCs represent only 10 percent of teaching hospitals, they train 45 percent of all residents in non-Federal hospitals. Another 12 percent of teaching hospitals train an additional 30 percent of residents.[37] Together, though these facilities represent only 5 percent of all hospitals, they train three-quarters of all residents. They also account for almost 20 percent of all inpatient cases.

Many AMCs are major research institutions involved with medical schools in conducting biomedical research and technology development. Medical schools and associated hospitals consistently receive slightly more than half of all National Institutes of Health extramural research funding.[38] These hospitals also carry out other research activities that are funded using medical school or hospital resources, rather than funds from outside sponsors.[39] Patient care revenues are often an important source of funds for the affiliated medical schools. On average, medical schools receive more than 10 percent of their support from hospital revenues.[40]

Capacity in high-cost specialized care units—including neonatal intensive care, burn care, the most intensive types of trauma and emergency care, and transplant services—is also concentrated in relatively few hospitals. Except for neonatal intensive care, less than 10 percent of all hospitals provide these services, and fewer than 5 percent furnish burn or level-one trauma care (see Table 3-11). Most facilities offering any of these services are teaching hospitals, and those providing several tend to be larger ones (see Table 3-12). Members of the Council of Teaching Hospitals (COTH)—generally large teaching hospitals with academic affiliations—are especially likely to provide these services, with 57 percent offering three or more. Urban public hospitals are also important sources, accounting for 41 percent of all burn care facilities and 33 percent of level-one trauma centers.

Even as they grapple with higher mission-related costs, teaching facilities are facing the same financial pressures as other hospitals. While PPS inpatient margins are exceptionally high in major teaching hospitals, their overall financial condition is still generally worse than that of other facilities. Although total margins have been rising for all hospitals, as a group major teaching facilities continue to have lower margins than other teaching and nonteaching hospitals.

The growth of managed care is putting especially strong pressure on major teaching hospitals in some MSAs. In 1995, major teaching facilities in markets with high HMO penetration had an aggregate total margin of 2.0 percent, compared with 5.3 percent for those located in MSAs with low HMO penetration.[41] Lower margins affect the amount of discretionary revenues teaching hospitals can devote to specialized missions, particularly those that are not fully funded.

Table 3-11. Specialty Care Units In Community Hospitals, by Hospital Group, 1995 (In Percent)

Hospital Group	Neonatal Intensive Care	Burn Unit	Level-One Emergency	Level-One Trauma	Transplant Service
All hospitals	16.8%	2.7%	9.8%	4.9%	9.2%
Urban	28.5	4.9	13.7	8.7	15.1
Rural	3.4	0.1	5.4	0.6	2.3
Urban teaching:					
Teaching	52.5	12.7	26.6	21.4	33.5
COTH member	77.5	28.5	29.4	42.8	63.9
Other teaching	41.0	5.4	11.5	9.1	19.5
Non-teaching	16.0	0.9	7.0	2.0	5.6
Urban bed size:					
<100 beds	1.5	0.0	5.3	0.9	2.4
100-299 beds	18.9	1.8	7.5	3.4	7.5
300-499 beds	54.3	9.9	21.4	15.7	26.5
500+ beds	78.5	20.6	46.4	36.5	55.8
Urban ownership:					
Voluntary	29.2	3.9	14.0	8.0	15.3
Proprietary	18.1	1.1	4.2	1.4	9.9
Government	35.9	13.7	22.2	19.2	19.5

Note: COTH = Council of Teaching Hospitals.

SOURCE: ProPAC analysis of data from the American Hospital Association Annual Survey of Hospitals.

Care to the Poor

Most hospitals provide services to those who lack health insurance or cannot pay for hospital care for some other reason. Indeed, hospitals provide such care as a public service. In 1995, uncompensated care cost the nation's hospitals more than $14 billion.[42] Some hospitals, however, provide a much larger share of uncompensated care than others.

The burden is much greater for public hospitals, particularly teaching or urban ones. Public major teaching hospitals, for instance, incur 7.1 percent of all hospital costs, but account for 21.5 percent of all

Table 3-12. Distribution of Community Hospitals With Specialty Care Units, by Hospital Group, 1995 (In Percent)

Hospital Group	Percentage of Hospitals	Number of Specialty Care Units			
		0	1	2	3 or more
All hospitals	100.0%	73.4%	17.9%	4.3%	4.5%
Teaching	19.7	33.9	29.8	15.2	21.1
COTH	5.9	7.5	15.4	20.6	56.7
Other teaching	13.8	45.1	35.9	12.9	7.7
Non-teaching	80.3	83.1	14.9	1.6	0.4
Proprietary	11.5	75.9	20.7	2.8	0.6
Voluntary	61.1	69.5	20.2	5.6	4.7
Government	27.4	81.1	11.4	2.0	5.6

Note: Rows may not sum to 100 due to rounding. Data indicate the percentage of hospitals having any of the following specialty care units: neonatal intensive care, burn, level-one emergency, level-one trauma care, and transplant services. COTH = Council of Teaching Hospitals.

SOURCE: ProPAC analysis of data from the American Hospital Association Annual Survey of Hospitals.

Table 3-13. Distribution of Uncompensated Care Costs, Total Costs, and Total Gains, by Hospital Group, 1995 (In Percent)

Hospital Group	Uncompensated Care Costs	Total Costs	Total Gains
Urban	88.7%	86.3%	6.1%
Rural	11.3	13.7	7.1
Major teaching			
Public	21.5	7.1	1.5
Private	11.3	12.2	3.7
Other teaching			
Public	2.8	1.4	7.0
Private	18.1	25.3	7.0
Non-teaching			
Public	6.6	6.3	6.3
Private	22.1	30.1	7.8
Total margin:			
First quartile	12.4	12.5	2.1
Second quartile	20.6	21.4	3.3
Third quartile	19.5	23.2	7.3
Fourth quartile	22.1	20.6	11.5
Voluntary	62.3	78.2	6.0
Proprietary	4.6	6.5	14.4
Urban government	29.6	11.7	3.3
Rural government	3.5	3.5	6.2
Low-income patient cost share:			
Urban			
> 45	27.0	8.1	1.4
25-45	14.9	13.9	5.3
< 25	32.8	50.4	7.1
Rural			
> 45	0.6	0.4	4.5
25-45	4.1	3.8	6.7
< 25	4.8	7.3	7.5

Note: Gains are the difference between the costs of providing care and the payments received, weighted by each payer's share of total costs. Data reflect inpatient and outpatient services for community hospitals. All values are for reported data only. Percentages in cost columns may not sum to 100 because some hospitals could not be categorized into certain hospital groups. Low-income patient cost share is the percentage of total hospital costs from uncompensated care, Medicaid, and Medicare Supplemental Security Income patients, plus losses attributable to state and local indigent care programs.

SOURCE: ProPAC analysis of data from the American Hospital Association Annual Survey of Hospitals.

uncompensated care costs (see Table 3-13). For urban government hospitals, these figures are 11.7 percent and 29.6 percent, respectively.

Rising financial pressure has raised concern about the willingness or ability of many hospitals to continue providing uncompensated care in a more competitive marketplace. A previous ProPAC analysis suggested that high managed care enrollment is associated with increased financial pressure from private payers and with greater reductions in the amount of uncompensated care hospitals provide.[43] Between 1992 and 1994, private payer payment to cost ratios declined 4.5 percent for hospitals located in urban areas with high managed care penetration; uncompensated care burdens for these hospitals also fell by 4.5 percent (see Table 3-14). The experience of hospitals located in areas with low managed care penetration was quite different: Their private payer payment to cost ratios rose 4.1 percent, while uncompensated care burdens fell only 0.1 percent.

Table 3-14. Change in Hospital Financial Performance, by Managed Care Penetration Rate, 1992-1994 (In Percent)

Financial Performance	Managed Care Penetration Rate: Low	Medium	High
Private payment to cost ratio	4.1%	-3.8%	-4.5%
Total payment to cost ratio	0.9	-0.8	-2.0
Uncompensated care burden	-0.1	-1.4	-4.5
Cost per adjusted admission	8.2	7.0	7.3

Note: Managed care penetration rates are based on enrollment in health maintenance and preferred provider organizations as a percentage of the total population in the metropolitan statistical area (MSA). Low penetration is less than 41 percent; medium is from 41 percent to less than 50 percent; high is from 50 percent to less than 60 percent. This analysis is limited to 89 of the largest MSAs and excludes those with penetration rates of 60 percent or more.

SOURCE: ProPAC analysis of data from the American Hospital Association Annual Survey of Hospitals and the National Research Corporation.

The situation is particularly tenuous for hospitals that furnish a large amount of indigent care. They often lack the private payer base that can offset uncompensated care losses. Private payers' share of costs in public major teaching hospitals, for instance, is less than 15 percent (see Table 3-7). Moreover, compared with other institutions, these hospitals are already getting substantially higher private payments relative to costs, which makes it difficult for them to compete. The private payer payment to cost ratio for these facilities is 154 percent compared with an all-hospital average of 124 percent.

These hospitals are also in much weaker financial condition than other institutions, despite the additional subsidies they receive. Total gains for public major teaching hospitals, for instance, were only 1.5 percent in 1995, far below those for other hospitals. Given that one of their missions is serving the poor, they may not be able to reduce uncompensated care, particularly if other hospitals are doing so. Consequently, any increase in uncompensated care burdens could put such hospitals at serious financial risk.

CONCLUSIONS

Changes in the financing of care and medical practice patterns are profoundly affecting the economic environment of most hospitals. Both the shift in demand from inpatient care to ambulatory and post-acute settings and increasing payment restraint by private and public payers have eroded hospitals' traditional revenue base. As more services have shifted from the inpatient setting to other sites and as private payers have demanded ever-larger payment discounts, most hospitals have seen a falloff in revenue growth. Moreover, many hospitals face even more losses as competing providers move into their traditional markets. As a result, hospitals have been forced to adapt to changes in their role in the continuum of care while grappling with a financially riskier environment.

Hospitals have responded to these unprecedented pressures by cutting their costs and attempting to improve their market positions. From 1994 to 1996, real hospital costs per adjusted admission actually declined for the first time in 20 years. Lower cost growth reflects hospitals' success in downsizing and improving productivity while restraining annual increases in wages. At the same time, cost restraint has raised concern that some patients may be receiving inadequate treatment.

Hospitals have also expanded into related lines of business, offering a wider range of ambulatory services as well as post-acute care like skilled nursing services and home health care. In addition, many hospitals have entered into new relationships with physicians and other providers to ensure the continued flow of patients and enhance their negotiating leverage with payers. Finally, some hospitals have consolidated operations with other hospitals through acquisitions, mergers, and a host of other arrangements.

Medicare has the potential to benefit from the changes the industry has made, especially the slowdown in the cost of inpatient care. Although Medicare may be able to constrain its spending for acute inpatient care, outpatient and post-acute services are likely to continue to become more financially burdensome. Except for acute hospital inpatient care and physicians' services, the program's current payment policies tend to encourage growth in

service volume and spending in most settings, without providing offsetting ways to control the volume of care.

Hospitals' success in restraining costs has led to a marked improvement in financial performance. Both PPS and total hospital margins are higher than they have been in many years. However, the financial pressure imposed by public and private payers is not uniform across areas or types of hospitals.

Recent changes in market conditions may be especially threatening to hospitals that pursue community-oriented missions. Activities such as teaching and research, providing costly services like trauma or burn care, and caring for the poor and uninsured are concentrated among a relatively small set of hospitals. These facilities traditionally have subsidized the costs of such activities using extra revenues from their core patient care business. As buyers of hospital services have become more price conscious, these hospitals are less able to continue using this method of financing. These socially valued services, and the hospitals that provide them, are thus facing increasing risk as market conditions continue evolving.

Notes to Chapter 3

1. Under Medicare, a beneficiary receiving care in a SNF pays a daily copayment from the twenty-first day until discharge or exhaustion of benefits at 100 days. Since 77 percent of beneficiaries' stays in hospital-based SNFs last fewer than 21 days, however, the average copayment liability in this setting is a small proportion of the total payment. Home health care is not subject to cost-sharing requirements.

2. Each hospital is still reimbursed for other approved training programs (nurses and allied health professions) based on Medicare's share of its allowable costs.

3. The data in this section and the next one are based on projections from ProPAC's PPS payment model, Congressional Budget Office estimates, and fiscal year 1995 MedPAR file data from HCFA. Maryland hospitals are excluded from the analysis because payments for Medicare patients under this state's rate setting waiver are structured differently from those under PPS.

4. Until fiscal year 1995, hospitals located in other urban areas (MSAs with a population under one million) and in rural areas (counties not included in an MSA) also had distinct national average standardized payment amounts. The difference between these standardized amounts was gradually phased out during the five-year span from fiscal year 1991 to fiscal year 1995. Hospitals located in other urban and rural areas may be eligible for the higher large urban payment amount if they meet certain criteria for geographic reclassification and receive approval from the Medicare Geographic Classification Review Board. The estimated average standardized amounts shown in Table 3-2 reflect the amounts hospitals would receive without reclassification; the effect of hospital reclassifications is summarized, along with other policies, under "other factors".

5. The wage index is applied to the labor-related portion (71.25 percent) of the standardized payment amount. For hospitals in Alaska and Hawaii, a cost of living adjustment is applied to the nonlabor-related portion (28.75 percent) to reflect the higher prices of supplies and other nonlabor inputs in these states. Hospitals meeting certain criteria may also be reclassified by the MGCRB into a labor market area other than the one in which they are located, thereby obtaining a higher wage index. The estimated effects of the wage index adjustment shown in Table 3-2 reflect the wage index that would apply without geographic reclassification. The effect of hospital reclassifications for the wage index is summarized (along with reclassifications for the standardized amounts and other policies) under "other factors".

6. Among statewide rural areas, the fiscal year 1997 wage index varies from a low of 0.679 in Mississippi to a high of 1.276 in Connecticut. For MSAs, the index ranges from 0.706 in Jacksonville, North Carolina, to 1.507 in Oakland, California.

7. In fiscal year 1997, the DRG weights range from 0.0777 (for a patient under 18 with an allergic reaction) to 16.0413 (for a patient who gets a tracheostomy). For a hospital located in a large urban area with a wage index of 1.0, the base operating payment rates for individual cases thus could range from $303.69 to $62,697.10.

8. 57 *Fed. Reg.* 39,990 (Sept. 30, 1992). Although the estimated percentage increase cited here relates to all operating payments per case, reclassification would have essentially the same effect on base operating payments per case. More than 60 percent of all reclassifications in fiscal year 1993 involved rural hospitals reclassified for the wage index or for the wage index and the standardized amount. By law, reclassifications are required to be budget neutral; that is, projected total payments to hospitals after reclassification must be the same as they would have been without this policy. Until fiscal year 1995, higher payments for reclassified hospitals were offset by reducing the standardized payment amounts for all urban hospitals. This policy changed when the differential in the standardized payment amounts for hospitals located

in rural and other urban areas was eliminated. Higher payments to reclassified hospitals are now offset by a proportional reduction in the standardized amounts for all hospitals.

9. 61 *Fed. Reg.* 46,307 (Aug. 30, 1996).

10. OBRA 1993 requires Medicare to phase out extra payments for cases based on length of stay (day outliers) and rely more on payments based on costliness (cost outliers). The law requires that day outlier payments be reduced in 25 percent increments. HCFA estimates that in fiscal year 1997, day outliers will account for about 8 percent of total outlier payments, a quarter of their 1994 level. In fiscal year 1998, extra payments will be made for cost outliers only.

11. Currently, the adjustment is approximately 7.7 percent for every 10 percent increment in teaching intensity, based on a hospital's ratio of interns and residents to beds. A hospital whose ratio is 0.2 thus receives an additional payment equal to about 15 percent of its total DRG operating payments (base operating payments plus outlier payments). This adjustment can increase DRG operating payments by 50 percent or more for hospitals with many residents.

12. A hospital's share of low-income patient days is the sum of two percentages. One is the share of Medicare inpatient days furnished to beneficiaries eligible for cash benefits under the Supplemental Security Income program. The other is the share of total patient days furnished to Medicaid recipients. The DSH adjustment for large hospitals (those with at least 100 beds) located in urban areas rises rapidly with increases in the facility's share of low-income patient days. The adjustments for small urban or rural hospitals are small fixed percentages.

13. A hospital whose base year hospital-specific rate is below its adjusted Federal rate for that year is considered a low-cost facility; all others are considered high-cost hospitals. Hospitals that obligated new capital projects on or before December 31, 1990, are permitted to modify their hospital-specific rates to include the related capital costs once the new assets are put in use for patient care. Therefore, a hospital's status as a high- or low-cost facility, and thus the payment method that applies, can change. The blend factors for this payment method change by 10 percentage points each year during the transition. In fiscal year 1997, the fully prospective rate consists of 40 percent of the hospital-specific rate and 60 percent of the Federal capital rate. In fiscal year 1998, the blend factors will change to 30 percent and 70 percent, respectively.

14. The hospital-specific rate is not adjusted for these factors, since the hospital's base year costs are assumed to reflect their effects fully.

15. The blended rate is the sum of two components. One is 85 percent of the hospital's current costs per case for old capital (capital acquired before the end of 1990 and put in service by October 1, 1994). The other is the hospital's new capital percentage multiplied by its Federal payment. The new capital percentage is the share of the hospital's current reasonable capital costs that is attributable to assets acquired after December 31, 1990. The Federal payment is the hospital's adjusted Federal rate multiplied by the DRG weight.

16. 61 *Fed. Reg.* 46,316 (Aug. 30, 1996).

17. Primary care specialties include family practice, general internal medicine, and pediatrics. Residents in obstetrics and gynecology, preventive medicine and public health, and geriatrics subspecialty programs are also paid using the higher primary care per resident payment amount.

18. Estimate based on data from selected issues of the *Journal of the American Medical Association.* See *JAMA* 266(7):933-43, August 21, 1991, and *JAMA* 276(9):739-48, September 4, 1996.

19. Rural primary care hospitals can choose between two payment methods for outpatient services. One is based on facility costs and professional charges; the other, on an all-inclusive rate combining facility and professional medical services.

20. Department of Health and Human Services, *Report to Congress: Medicare Hospital Outpatient Prospective Payment*, March 1995. See

also, Prospective Payment Assessment Commission, *Analysis of the Secretary's Proposal for Medicare Payment for Hospital Outpatient Services*, Congressional Report C-95-01, July 1995.

21. A combination of factors led to this large increase in payments per case. First, the base year hospital costs on which the initial PPS rates were set were overestimated due to the use of unaudited Medicare Cost Reports. Second, the aggregate CMI increased substantially, in part because hospitals placed greater emphasis on the accuracy and completeness of patients' medical records. As a result, many patients were assigned to higher-weighted DRGs than they would have been prior to PPS. Moreover, less complicated cases with low DRG weights, such as cataract extractions, were less likely to be treated in the inpatient setting, raising the average complexity of cases treated in the hospital. This was reflected in a higher CMI.

22. Data from the American Hospital Association's (AHA) Annual Survey of Hospitals show total margins increasing from 2.0 percent in 1976 to 4.2 percent in both 1982 and 1983 and 5.6 percent in 1995. The total margins obtained using this survey differ somewhat from those presented in this chapter, which are based on data from the Medicare Cost Reports submitted to HCFA.

23. A hospital's share of poor patients (its low-income patient cost share) refers to the percentage of costs that the hospital allocated to local indigent care programs, uncompensated care, Medicaid patients, and Medicare patients eligible for Supplemental Security Income benefits.

24. Gains and losses differ from margins. Margins are calculated as the difference between total revenues and total costs as a percentage of total revenues.

25. Gains and losses for any payer include all payments and costs associated with furnishing inpatient, outpatient, or other services to patients covered by that payer. Medicare gains and losses may therefore differ from PPS margins. PPS margins exclude revenue and costs from all activities not related to acute inpatient care, as well as costs deemed not allowable under Medicare rules.

26. American Hospital Association, *Hospital Statistics 1994-1995 Edition* (Chicago: AHA, 1994) xlii. The text refers to growth of surgical operations per year in community hospitals between 1983 and 1993.

27. American Medical Association, *Medical Groups in the U.S.: A Survey of Practice Characteristics* (Chicago: AMA, 1996) 21.

28. AHA Annual Surveys, 1993 and 1995. The 1995 total is calculated by summing the numbers offering open PHOs (19.1 percent) and closed PHOs (7.9 percent) and subtracting the number offering both (0.7 percent) to avoid double counting.

29. AHA Annual Surveys, 1993 and 1995.

30. AHA Annual Surveys, 1993 and 1995. For its survey the AHA defines a system as "a corporate body that may own and/or manage health provider facilities or health-related subsidiaries as well as non-health-related facilities including free-standing facilities and/or subsidiary corporations." It defines a network as "a group of hospitals, physicians, other providers, insurers and/or community agencies that work together to coordinate and deliver a broad spectrum of services to their community." Finally, it defines an alliance as "a formal organization, usually owned by shareholder/members, that works on behalf of its individual members in the provision of services and products and in the promotion of activities and ventures." American Hospital Association, *Hospital Statistics 1996-1997 Edition* (Chicago: AHA, 1996)162.

31. These data differ somewhat from those reported by the AHA. They include partnerships, leases, and other forms of consolidation in addition to conventional mergers. They are collected by Irving Levin Associates based on a review of announcements, press reports, Securities and Exchange Commission filings, and other sources. See Irving Levin Associates, Inc., *The Hospital Acquisition Report, Third Edition, 1997 (*New Canaan,

CT: Irving Levin Associates, Inc., 1997). By contrast, the AHA data identify mergers by disappearance of hospitals from the AHA Annual Survey. The AHA data are available through 1995, whereas the Levin data are available through 1996.

32. For an overview of strategy options see Michael W. Peregrine, "Creative Alliances Offer Alternatives to Corporate Mergers," *Healthcare Financial Management* 51(1): 52-55, January 1997. For examples of hospital consolidations, see Irving Levin Associates, Inc., *The Hospital Aquisition Report, Third Edition, 1997.*

33. Adjusted admissions provide an estimate of the total output hospitals produce, combining both admissions and outpatient visits.

34. The decline in FTEs resulted in increases in the number of adjusted admissions per FTE employee, which is one measure of labor productivity. The number of adjusted patient days per FTE, another measure of labor productivity, has not shown the dramatic improvements observed for the adjusted admissions measure. However, neither measure adjusts for potential changes in patient amenities resulting from lower staffing levels.

35. Changes in the composition of the work force (hiring more RNs, for example) do not affect the growth in the employment cost index because the index is designed to hold labor skill mix constant.

36. Level-one trauma units are considered regional trauma centers, capable of providing complete care for all types of injuries. Hospitals with such units also play a leadership role in trauma research and education.

37. This group of hospitals includes non-Federal teaching hospitals that are not AMCs but that train at least 100 residents.

38. Association of American Medical Colleges Task Force on Medical School Financing, *The Financing of Medical Schools* (Washington, DC: AAMC, 1996) 31-36.

39. This includes funds necessary to compete for research contracts.

40. Association of American Medical Colleges, *The Financing of Medical Schools*, 4.

41. HMO penetration is defined using InterStudy data from January 1, 1996. The criterion for high penetration is that 35 percent or more of an MSA's population is in an HMO; for low penetration, it is that 5 percent to 20 percent of an MSA's population is in an HMO.

42. Data from the AHA, Annual Survey of Hospitals, 1995.

43. Prospective Payment Assessment Commission, *Medicare and the American Health Care System: Report to the Congress, June 1996* (Washington, DC: ProPAC, 1996) 48-49.

Chapter 4

Post-Acute Care

Chapter 4

Post-Acute Care

Post-acute care, once a minor component of the Medicare program, is gaining prominence. More beneficiaries are using post-acute care—and services of higher intensity—than ever before. As a result, program payments for post-acute care are rising faster than those for other types of services and are consuming an ever-larger share of total outlays. Because the vast majority of Medicare's post-acute care spending is financed through Part A (hospital insurance), this rapid growth threatens the solvency of the Hospital Insurance trust fund. Medicare's post-acute care policies are thus a prime target for reform.

Much of the recent growth in post-acute care use and spending is related to industrywide changes both in the nature of the services delivered and in the providers of such care. In the past, post-acute care generally comprised low-intensity nursing care and therapy furnished after a hospitalization, either in patients' homes or in other institutional settings. This pattern is changing, with a growing number of services previously provided during an acute hospital stay being delivered in these sites. As a result, both the level and intensity of care furnished by some post-acute care providers have increased, and the distinction between acute and post-acute care is fading.

The delineation between post-acute and long-term care is also cloudy, since many post-acute care providers meet patients' chronic needs as well. Moreover, the traditional differences among types of post-acute care providers are diminishing as they increasingly offer similar services. At the same time, the supply and variety of post-acute care providers are rising. This fast-changing environment creates ample opportunity to shift the delivery of services across sites, substitute care among providers, and furnish additional services to patients.

Medicare's post-acute care policies have not kept pace with the rapidly evolving health care market. Poorly specified benefits like the homebound criterion for home health care coverage have allowed use to increase, while inconsistent interpretation of these benefits has contributed to geographic variation in use. The program's continued reliance on cost-based reimbursement has also encouraged rising utilization and growth in the number of post-acute care providers. That payment methods differ across provider types hinders Medicare's ability to control overall service capacity and use. Consequently, Medicare spending for post-acute care has accelerated over the last decade.

Because payments to skilled nursing facilities (SNFs) and home health agencies account for the largest share of Medicare's post-acute care spending and are among the fastest growing, the Congress and the President are focusing payment reform efforts on these areas. Both propose to replace current cost-based reimbursement methods with prospective payment systems. Such systems for SNFs and home health agencies may slow rapidly rising expenditures in the near term. Over the long run, though, a more comprehensive strategy that spans across provider types will be necessary.

Controlling expenditures in individual settings creates incentives to shift some care to other sites such that patients use multiple providers during their course of treatment. Because Medicare beneficiaries can receive post-acute care from a wide variety of providers, the potential for site-of-care substitution among SNFs, home health agencies, and other providers is great. Separate payment reform measures thus may have little effect on slowing Medicare's total post-acute care spending if they do not reduce overall service use across settings.

Consistent payment methods where post-acute care providers receive comparable amounts for the same services furnished to similar types of patients would encourage treatment decisions based on

patients' needs and preferences rather than on reimbursement considerations. But even this type of system would create few incentives to coordinate care across sites and efficiently manage a patient's total health care needs, since each provider would still receive a separate payment. Ultimately, a payment system that covers a broader spectrum of care during an episode of illness may be desirable.

To better understand the structure of this rapidly growing industry, the Prospective Payment Assessment Commission (ProPAC) describes Medicare's post-acute care coverage guidelines and payment policies in this chapter, as well as service delivery patterns across providers. The chapter also highlights various issues regarding individual provider types and presents recent ProPAC analyses of post-acute care use and spending. A number of concerns are raised that should be addressed when considering changes in Medicare payment policies for post-acute care.

POST-ACUTE CARE SERVICES AND PROVIDERS

Post-acute care generally refers to the health care services patients receive following treatment for an acute illness or injury. It encompasses a wide array of convalescent and palliative services ranging from vigorous, comprehensive medical rehabilitation for orthopedic patients, for example, to physical comfort and pain management for those with terminal conditions. Post-acute care consists primarily of services furnished by health care professionals such as nursing staff; physical, occupational, speech, and respiratory therapists; counselors; and medical social workers. More broadly, it includes informal supportive care from family and friends.

Medicare beneficiaries receive post-acute care services in inpatient facilities, ambulatory care settings, and at home. Within each of these settings, beneficiaries may choose among a growing number and variety of providers (see Table 4-1). Entities usually regarded as post-acute care providers include skilled nursing facilities, home health agencies, rehabilitation hospitals and units, and long-term care hospitals. Services furnished by these providers, as well as hospice care, are covered under Medicare Part A. Other providers, such as various outpatient facilities and individual practitioners, may also furnish post-acute care. Services provided by these entities and some home health care are covered under Medicare's Supplementary Medical Insurance (Part B). Since 1990, the number of hospices has increased the fastest, followed by comprehensive outpatient rehabilitation facilities (CORFs); long-term care hospitals; and other outpatient rehabilitation providers (such as clinics, rehabilitation agencies, and public health agencies).

In the past, the types of beneficiaries treated and the mix of post-acute care services furnished differed across providers. The specialization of patient care led to a segmented industry with multiple providers delivering distinctly different services and levels of care. Reflecting this specialization, insurers implemented differential coverage policies and payment methods based on the site of care rather than on the types of services furnished.

Today, distinctions among providers are less clear owing to structural changes in the financing and delivery of health care services. (See Chapters 1 and 3.) Payers are forging new financial arrangements with and among providers who, in turn, are reorganizing the delivery of care to adapt to an increasingly competitive market. Those that previously furnished a distinct level of care have expanded the types of services they offer and have entered into new lines of business. Most traditional acute care hospitals, for example, now also own post-acute care providers. SNFs increasingly offer services that are less intensive than acute care but more rigorous than traditional skilled nursing services. Long-term care hospitals are extending their service capacity by furnishing intensive respiratory therapies like weaning ventilator-dependent patients. The range of home care services has broadened to include a variety of sophisticated intravenous therapies. At the same time, home health agencies are also providing more long-term care services to meet the needs of a growing number of frail elderly and disabled beneficiaries. As a result, services furnished by different types of Medicare-participating providers overlap substantially.

Despite this overlap, Medicare continues to employ provider-specific policies with different eligibility and certification requirements, limits on coverage, beneficiary cost sharing, and payment methods (see Table 4-2). Differential payment

Table 4-1. Medicare-Certified Post-Acute Care Providers, Selected Years

Provider Type	1990	1992	1994	1996	Average Annual Increase
Skilled nursing facility	10,508	12,174	13,878	15,553	6.8%
Hospital-based	1,145	1,352	1,718	2,084	10.5
Free-standing	8,120	9,502	10,818	12,086	6.9
Swing-bed hospital	1,243	1,320	1,342	1,383	1.8
Rehabilitation facility	813	923	1,019	1,048	4.3
Hospital	135	164	195	189	5.8
Distinct-part unit	678	759	824	859	4.0
Long-term care hospital	90	102	146	185	12.8
Home health agency	5,793	6,419	8,057	9,886	9.3
Hospital-based	1,543	1,786	2,207	2,593	9.0
Free-standing	4,135	4,526	5,720	7,104	9.4
Other[a]	115	107	130	189	8.6
Hospice	902	1,208	1,667	2,135	15.4
Facility-based[b]	267	340	430	543	12.6
Home health agency	344	404	615	812	15.4
Free-standing	291	464	622	780	17.9
Clinic, rehabilitation agency, public health agency	1,241	1,481	1,996	2,469	12.1
Physical therapy only	453	557	859	1,152	16.8
Speech pathology only	187	183	180	188	0.1
Physical therapy and speech pathology	601	730	920	1,088	10.4
Occupational therapy only	—	11	37	41	38.9
Independent therapist[c]	—	6,716[d]	7,251[e]	6,756[f]	0.1
Physical therapist	—	6,352[d]	6,798[e]	6,293[f]	-0.2
Occupational therapist	—	364[d]	453[e]	463[f]	6.2
Comprehensive outpatient rehabilitation facility	191	217	257	403	13.3

Note: Data are as of December of each year unless otherwise noted.

[a] Includes home health agencies based in rehabilitation and skilled nursing facilities.

[b] Includes hospices based in hospitals and skilled nursing facilities.

[c] Medicare does not certify therapists. Counts represent participating and nonparticipating therapists, both of whom bill Medicare directly.

[d] As of January 1993.

[e] As of January 1995.

[f] As of January 1997.

SOURCE: Health Care Financing Administration, Office of Survey and Certification and Bureau of Program Operations.

policies allow for service substitution across sites and encourage the use of several providers over the course of an illness, both of which have contributed to the escalation in beneficiaries' use of services and in Medicare's post-acute care expenditures. Understanding these policies and their varying effects is critical for designing and implementing solutions to curb Medicare spending.

Skilled Nursing Facilities

Skilled nursing facilities provide a variety of post-acute care services to Medicare beneficiaries, including nursing care; physical, occupational, respiratory, and speech therapy; and medical social services. To qualify for the SNF benefit, patients must need skilled nursing or rehabilitative care on a daily basis within 30 days of a minimum three-day hospital stay. Medicare covers up to 100 days of care for each benefit period.[1] A daily copayment equal to one-eighth of the inpatient hospital deductible ($95 in 1997) is required beginning on the twenty-first day of care.

Medicare provides coverage for most SNF services under Part A.[2] Payments for services

Table 4-2. Medicare-Covered Services, Certification Requirements, and Payment Methods for Post-Acute Care, by Type of Provider

Provider Type	Covered Services	Certification Requirements	Payment Method
Skilled nursing facility	Semi-private room and board; skilled nursing; physical, occupational, respiratory, and speech therapy; social services; laboratory services	Has transfer agreement with hospital; 24-hour nursing services; registered nurse and physician on staff; has available dietary, pharmaceutical, dental, and social services	Part A, cost-based reimbursement; routine costs are subject to limits that vary for free-standing and hospital-based urban and rural facilities; allowable capital and ancillary costs are fully reimbursed
Rehabilitation hospital	Semi-private room and board, general nursing, other hospital services and supplies	75 percent of inpatients require intensive rehabilitation	Part A, cost-based reimbursement; operating costs are subject to ceilings and incentive payments; allowable capital costs are fully reimbursed
Rehabilitation unit	Semi-private room and board, general nursing, other hospital services and supplies	Part of PPS hospital with separate beds and records; 75 percent of inpatients require intensive rehabilitation	Part A, cost-based reimbursement; operating costs are subject to ceilings and incentive payments; allowable capital costs are fully reimbursed
Long-term care hospital	Semi-private room and board, general nursing, other hospital services and supplies	Has average length of stay over 25 days; if located in another hospital, must be independent	Part A, cost-based reimbursement; operating costs are subject to ceilings and incentive payments; allowable capital costs are fully reimbursed
Home health agency	Intermittent or part-time therapy, skilled nursing, personal care, medical social services, durable medical equipment and other supplies	Skilled nursing care and one therapeutic service (physical, speech, or occupational therapy; medical social services; or home health aide services)	Part A or B, cost-based reimbursement; limits for different types of visits; limits vary for free-standing and hospital-based urban and rural agencies
Hospice[a]	Skilled nursing, physician, and therapy services; personal care, counseling, and medical social services; medical supplies and drugs; short-term and respite care for the terminally ill	Must provide covered services, use volunteers, and furnish 80 percent of services in the patient's home	Part A, per diem payments; separate rates for routine home care, continuous home care, inpatient respite care, and general inpatient care
Hospital, outpatient[a]	Diagnostic services, therapy, and ambulatory surgeries	Hospital is Medicare-certified	Part B, cost- or charge-based for some services; fee schedule for others
Comprehensive outpatient rehabilitation facility	Physician services; physical, occupational, and speech therapy; nursing, social, and psychological services; orthotic and prosthetic devices	Physician, social, and psychological services onsite; physical therapy offsite; personnel to coordinate treatment	Part B, cost-based reimbursement; lesser of 80 percent of costs or costs minus 20 percent of charges
Outpatient rehabilitation provider[b]	Outpatient physical therapy, occupational therapy, and speech pathology under a plan of treatment	Clinics must have three or more physicians on staff; rehabilitation agencies must furnish multidisciplinary therapy; public health agencies must be controlled by a state or locality	Part B, cost-based reimbursement; lesser of 80 percent of costs, or lesser of costs or charges minus 20 percent of charges
Independent therapist	Physical or occupational therapy services in therapist's office or beneficiary's home	Must be licensed; own office and adequate equipment; and able to perform exercises, modalities, and tests	Part B, Medicare physician fee schedule, payments limited to $900 per year per beneficiary for each type of therapy
Physician office	Therapy performed by either a physician or a therapist employed by the physician	Must be state-licensed	Part B, Medicare physician fee schedule

[a] Includes facility services only. Physician services are paid separately. [b] Includes clinics, rehabilitation, and public health agencies.

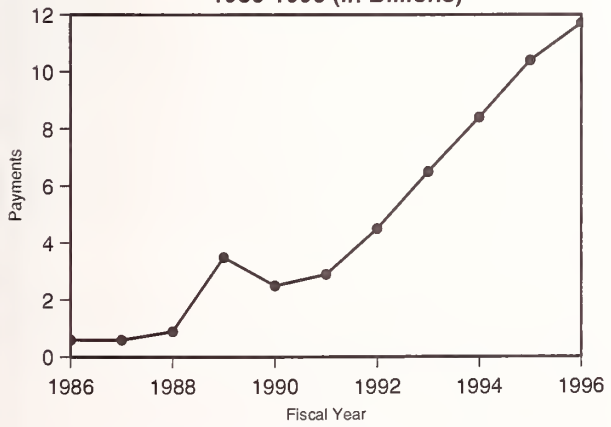
SOURCE: 42 C.F.R. §§ 405-24 and relevant sections of Medicare provider manuals.

furnished by SNFs are based on facility-specific costs. Routine costs, which include room, board, and skilled nursing services, are subject to daily cost limits. Separate limits apply based on location (urban or rural) and whether facilities are hospital-based or free-standing. There are no cost limits for capital expenses or for ancillary services such as physical, occupational, and speech therapy; laboratory tests; and radiology procedures. New SNFs are exempt from the routine cost limits for up to their first four years of operation.

Growth in Utilization and Spending—Over the past decade, SNF payments have been among the fastest growing components of Medicare spending, climbing, on average, 35 percent annually since 1986. Part A SNF expenditures reached an estimated $11.7 billion in 1996 (see Figure 4-1). Despite a slowdown in recent years, growth in SNF spending continues to outpace that for other services. As a result, SNF outlays now represent 9 percent of total Part A expenditures, up from 1 percent in 1986. (See Appendix C for more detailed information on Medicare enrollment and spending.)

The surge in spending for SNF services began in the late 1980s, largely because of changes in Medicare's benefit and certification policies. First, the Omnibus Budget Reconciliation Act (OBRA) of 1987 eliminated the distinction between SNFs and intermediate care facilities, which previously were certified only to provide less intensive nursing care under Medicaid. That drove up the supply of SNF beds. Second, responding to a legal challenge, the Health Care Financing Administration (HCFA) clarified its coverage guidelines in 1988, allowing more enrollees to qualify for the benefit and more SNF patients to receive therapy and other ancillary services.[3] Finally, the Medicare Catastrophic Coverage Act (MCCA) of 1988, which later was repealed, changed the nature of the SNF benefit by eliminating the requirement of a prior hospital stay and extending from 100 to 150 the number of covered SNF days allowed per benefit period. MCCA also significantly reduced the financial burden on SNF patients by lowering the required cost sharing.

Figure 4-1. Medicare Part A Skilled Nursing Facility Payments, 1986-1996 (In Billions)



Note: Payments are incurred Part A expenditures rather than outlays and do not include beneficiary copayments.

SOURCE: Health Care Financing Administration, Office of the Actuary.

Those changes caused Medicare SNF spending to skyrocket 276 percent between 1988 and 1989, as the number of beneficiaries receiving SNF services rose 66 percent and the number of covered SNF days leapt from 28 per person served to 47 (see Table 4-3). With the repeal of MCCA in 1989, the number of SNF days per user dropped to below 40, where it has remained. Growth in the number of beneficiaries receiving SNF care, however, was unchecked; by 1996, 3 percent of all Medicare enrollees received SNF care, compared with just 1 percent a decade earlier. Although the number of SNF users has climbed almost 10 percent annually since 1992, the rate of increase appears to be slowing. Between 1995 and 1996, the number of people served and the total number of covered SNF days each grew by only 3 percent. Nevertheless, Medicare payments for SNF services went up 15 percent over the same period.

Much of the growth in SNF expenditures is due to increases in payments for ancillary services, since there are no cost limits for these services. ProPAC found that between 1988 and 1996, ancillary services rose from 15 percent to 29 percent of total SNF charges, indicating substantial growth in the number of ancillary services provided. Although Medicare's payments are based on costs, not charges, this finding reveals the importance of ancillary services in the overall growth of Medicare SNF spending. In fact, by 1994 almost half of Part A SNF costs per day were for ancillary services. Consequently, Medicare's average SNF payment climbed from $98 per day in 1990 to $292 in 1996, even though the average daily routine cost limit remained roughly the same (see Figure 4-2).

Table 4-3. Medicare Skilled Nursing Facility Use, 1986-1996

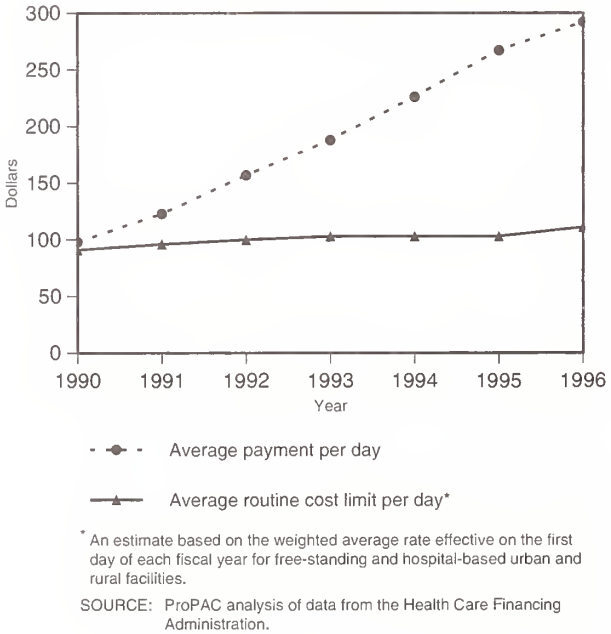
Year	People Served		Days	
	Number (In Thousands)	Per 1,000 Enrollees	Number (In Millions)	Per Person Served
1986	304	10	8.2	26.8
1987	293	9	7.4	25.4
1988	384	12	10.7	27.8
1989	636	19	29.8	46.8
1990	638	19	25.1	39.4
1991	671	19	23.7	35.2
1992	785	22	29.0	36.9
1993	908	25	34.4	37.9
1994	1,068	29	37.1	34.7
1995	1,110	30	39.0	35.1
1996*	1,145	30	40.2	35.1
Average Annual Increase	14.2%	11.6%	17.2%	2.7%

* Estimated.

SOURCE: Health Care Financing Administration, Office of the Actuary.

Facility Differences—Skilled nursing services are provided in free-standing and hospital-based SNFs. In addition, rural hospitals designated as swing-bed facilities can use acute-care beds to provide SNF services to Medicare beneficiaries. In 1996, there were 15,553 Medicare-certified SNFs, up from 10,508 in 1990. Free-standing SNFs account for more than three-quarters of all SNFs. But the number of hospital-based facilities is growing rapidly, increasing 10.5 percent annually between 1990 and 1996, compared with 6.9 percent for free-standing SNFs.

Figure 4-2. Medicare Part A Skilled Nursing Facility Average Payments and Routine Cost Limits Per Day, 1990-1996



* An estimate based on the weighted average rate effective on the first day of each fiscal year for free-standing and hospital-based urban and rural facilities.

SOURCE: ProPAC analysis of data from the Health Care Financing Administration.

The patterns of care furnished by different types of SNFs vary widely. Although hospital-based facilities accounted for more than a quarter of all SNF admissions in 1994, they furnished only 17 percent of all Medicare-covered SNF days (see Table 4-4). By comparison, free-standing SNFs accounted for 68 percent of SNF admissions but 82 percent of all days. That discrepancy is due to the longer lengths of stay in free-standing SNFs. In 1994, beneficiaries treated in such facilities stayed an average of 34 days, while those in hospital-based SNFs averaged 17 days. That disparity is increasing: Between 1990 and 1994, the average length of stay in free-standing SNFs increased more than two days, while in hospital-based SNFs it dropped more than three days.

The costs of caring for SNF patients also vary substantially across provider types. A ProPAC analysis of 1994 data found that average Part A costs in free-standing SNFs were $235 per day, while those for hospital-based facilities were $443 (see Table 4-5). That gap is related primarily to differences in routine costs per day, which were more than twice as high

Table 4-4. Medicare Admissions and Covered Days, by Type of Skilled Nursing Facility, 1990 and 1994

Type of Facility	Share of Admissions		Share of Days		Days Per Admission	
	1990	1994	1990	1994	1990	1994
All	100.0%	100.0%	100.0%	100.0%	28.1	28.1
Free-standing	73.1	67.9	82.0	81.6	31.5	33.8
Hospital-based	20.5	27.3	14.9	16.5	20.5	17.0
Swing-bed	6.4	4.8	3.0	2.0	13.3	11.5

Note: Columns may not sum to 100 percent due to rounding.

SOURCE: ProPAC analysis of MedPAR data from the Health Care Financing Administration.

for hospital-based facilities compared with free-standing SNFs. Across hospital-based SNFs, the variation in routine costs was substantial, with costs at the most expensive facilities almost four times higher than those at the least expensive ones. Variation across free-standing SNFs was less dramatic.

It is not clear why length of stay or costliness of care varies so much across provider types. Some of the cost differences may simply be the result of hospitals allocating overhead costs to their skilled nursing facilities, thereby increasing the apparent cost of their SNF services. In addition, a larger share of hospital-based facilities are new providers that are exempt from cost limits, resulting in relatively higher costs per day.

Some of the variation, however, is probably due to differences in the types of patients treated by these facilities. A ProPAC analysis of the conditions for which beneficiaries were hospitalized before entering skilled nursing facilities found that the mix of patients, as measured by the diagnosis-related group (DRG) assigned in the hospital, was remarkably similar, regardless of SNF type.[4] However, within a DRG, patients can differ in severity of illness, functional limitations, and comorbidities. Indeed, free-standing SNFs are likelier than hospital-based facilities to care for patients who are 85 and older, a patient population who tends to have greater functional limitations and comorbidities and therefore may require longer stays (see Table 4-6).

Free-standing facilities also furnish care to a higher proportion of Medicare patients who receive

Table 4-5. Medicare Part A Skilled Nursing Facility Average Costs Per Day, by Type of Facility, Fiscal Year 1994

Facility Type	Average Costs Per Day*		
	Routine	Ancillary	Total
All	$158	$116	$274
Free-standing	126	109	235
Hospital-based	298	145	443

Note: Swing-bed skilled nursing facilities and those that are paid on a prospective basis (those with fewer than 1,500 Medicare days per year) are not included.

* To account for differences in input prices, costs were standardized using Medicare's hospital wage index.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

Table 4-6. Characteristics of Medicare Beneficiaries Using Skilled Nursing Facilities, by Type of Facility, Fiscal Year 1994 (In Percent)

Characteristic	All SNFs	Free-standing	Hospital-Based	Swing-Bed Hospital
Female	66.0%	66.7%	65.0%	63.2%
Male	34.0	33.3	35.0	36.8
Age				
<65	4.0	3.4	5.2	3.9
65-74	21.0	18.4	27.0	21.9
75-84	41.3	41.1	41.7	42.6
85+	33.7	37.0	26.1	31.6
Medicare status				
Aged	95.0	95.5	93.9	95.9
Disabled	3.5	3.0	4.6	3.7
ESRD	1.5	1.5	1.6	0.4
Eligibility Status				
Medicare only	70.4	68.4	79.4	77.1
Dual eligible	29.6	31.6	20.6	22.9

Note: Percentages in columns may not sum to 100 due to rounding. SNF = skilled nursing facility. ESRD = end-stage renal disease. Dual eligible = Medicare beneficiaries who receive Medicaid assistance.

SOURCE: ProPAC analysis of MedPAR data from the Health Care Financing Administration.

Medicaid assistance. These dual eligibles are more likely than other Medicare beneficiaries to be disabled and to report more limitations in performing activities of daily living.[5] The presence of these functional limitations may require longer lengths of stay. A ProPAC analysis of 1994 data found that, while dual eligibles accounted for about a quarter of all SNF stays, they represented 40 percent of all 100-day stays. Many of these enrollees may already have been residents of nursing facilities before they qualified for the SNF benefit. As a result, they are more likely to stay in the nursing facility for custodial care after exhausting their Medicare SNF coverage. Since Medicare's payment rates usually are higher than Medicaid's, facilities and Medicaid programs alike have a financial incentive to use Medicare's SNF benefit following an acute care hospitalization of a long-term custodial patient.

Home Health Agencies

To receive home health services under Medicare, a beneficiary must be confined to the home and under the care of a physician who prescribes a treatment plan that includes intermittent skilled nursing services or physical or speech therapy. Once such care has been authorized, the patient may receive an unlimited number of those qualifying services, as well as home health aide visits, medical social services, occupational therapy, medical supplies, and durable medical equipment.[6] There usually are no beneficiary cost-sharing requirements for home health care.[7]

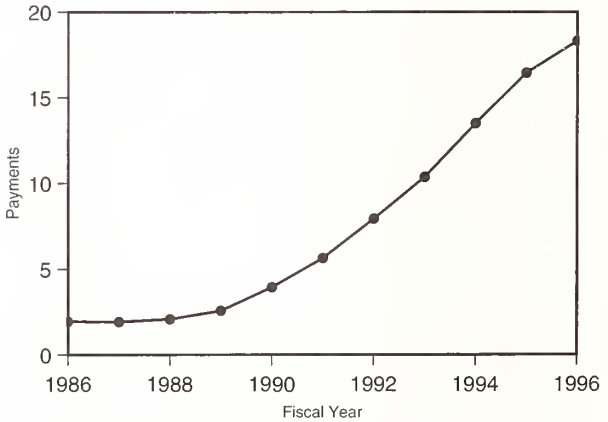
Medicare pays home health agencies the lower of their total costs or an aggregate limit.[8] Each agency's aggregate limit is its number of Medicare visits multiplied by a per visit cost limit for each of six types of services, summed across all visits. The cost limit for each kind of service equals 112 percent of the average cost per visit for all free-standing agencies, calculated separately for urban and rural areas.

Utilization and Spending Growth—Medicare payments for home health services have increased dramatically over the past decade, climbing an average of 25 percent annually since 1986. In 1996, program expenditures for these services reached an estimated $18.3 billion (see Figure 4-3).[9] Those payments accounted for about 14 percent of total Part A spending, up from about 4 percent in 1986. Because Medicare applies limits to its payments for home health services, payments per visit have remained relatively constant. Expenditure growth, therefore, has been fueled by greater numbers of enrollees receiving home health care and by more visits provided to each patient.

Changes in Medicare's home health benefit have driven up use. Before 1980, beneficiaries could qualify for home health care under Part A only after a minimum three-day hospital stay and were limited to 100 visits.[10] OBRA 1980 revoked those policies, allowing more enrollees to qualify for services and permitting more visits. At the same time, the legislation led to an increase in the supply of providers by allowing proprietary agencies in states without licensure laws to participate in Medicare.

Several administrative changes made to coverage guidelines in the mid-1980s slowed the growth in the number of people receiving services and reduced the number of visits per user. These changes were the basis of a class action lawsuit in 1988, in which the court ruled that HCFA's interpretation of the regulations was too narrow.[11] Largely because of this case, both the number of beneficiaries receiving home health care and the number of visits per user began to climb (see Table 4-7). Between 1989 and 1996, the number of people served per 1,000 beneficiaries doubled, while the number of visits per user surged from 27 to 77. One in 10 Medicare beneficiaries now receives home health care at some time during the year.

Figure 4-3. Medicare Home Health Care Payments, 1986-1996 (In Billions)



Note: Payments are incurred Medicare Part A and Part B expenditures, rather than outlays.

SOURCE: Health Care Financing Administration, Office of the Actuary.

Table 4-7. Medicare Part A Home Health Care Use, 1986-1996

Year	People Served		Visits	
	Number (In Thousands)	Per 1,000 Enrollees	Number (In Thousands)	Per Person Served
1986	1,571	49	38,000	24
1987	1,544	48	35,591	23
1988	1,582	48	37,132	23
1989	1,685	50	46,199	27
1990	1,940	57	69,532	36
1991	2,223	64	99,183	45
1992	2,523	71	134,877	53
1993	2,868	79	169,142	59
1994	3,175	86	220,693	70
1995	3,570	95	266,428	75
1996*	3,735	98	285,733	77
Average Annual Increase	9.0%	7.2%	22.4%	12.4%

* Estimated.

SOURCE: Health Care Financing Administration, Office of the Actuary.

Variation in Beneficiary Service Use—In 1994, the average Medicare enrollee using home health care received 70 visits. But this average masked wide variation in patterns of use. Almost a quarter of home health users received fewer than 10 visits, while more than half had fewer than 30 (see Table 4-8). Beneficiaries with fewer than 30 visits, however, accounted for only 10 percent of all visits and only 3 percent of all home health aide visits. Conversely, the 12 percent of home health users who received 150 visits or more accounted for over half of all visits and 68 percent of aide visits. These heavy users received an average of 275 visits.

Home health care is considered to be a post-acute service and, in fact, is the most frequently used type of service following a hospital discharge.[12] Those who used home health care in the 30 days following discharge in 1994 averaged 14.6 visits, about half of which were for skilled nursing services. Patients who were using home health care before being hospitalized tended to receive more services than others after discharge, averaging about 16 visits in the first 30 days.

But relatively few home health visits are preceded by a hospital stay. In 1994, only 26 percent of visits were associated with a prior hospitalization within 60 days. Only half of all visits were made to beneficiaries who had a hospital stay within the previous year.

ProPAC examined the length of episodes during which home health visits occurred to better

Table 4-8. Home Health Visits Per User, Fiscal Year 1994

Number of Visits Per User	Percent of Total				Average Number of Visits Per User
	Users	Visits	Skilled Nursing Visits	Home Health Aide Visits	
1-9	23.0%	1.8%	3.2%	0.3%	5
10-29	30.2	8.5	13.1	2.7	18
30-49	13.4	8.1	10.9	4.4	38
50-99	14.5	16.0	18.8	11.9	70
100-149	6.6	12.6	12.2	12.8	122
150+	12.3	53.1	41.7	67.9	275

Note: Columns may not sum to 100 percent due to rounding.

SOURCE: ProPAC analysis of a 20 percent sample of home health claims from the Health Care Financing Administration.

understand home health visit patterns. Episodes were created by grouping series of visits during fiscal year 1994 that were preceded and followed by 60 days without visits. The episodes were categorized as short (lasting from one to 30 days), medium (31 to 120 days), long (121 to 165 days), or very long (166 to 365 days).

Not all home health episodes fell into these four categories, however. Almost 36 percent had a 60-day gap either before or after the series of visits, but not both. These were categorized as crossover episodes. In addition, about 9 percent of the episodes were classified as continuous because they lacked a 60-day gap both before and after the 12-month study period, lasting for at least 14 months. This category comprises the most chronic of home health users.

Half of all episodes in 1994 were of short or medium duration (see Table 4-9). These episodes represented 19 percent of all visits, but accounted for 23 percent of skilled nursing visits and 11 percent of aide visits, indicating that the care entailed relatively greater nursing intensity. Continuous episodes, on the other hand, accounted for 33 percent of all visits and 42 percent of all aide visits.

The characteristics of beneficiaries using home health care in fiscal year 1994 varied by length of episode (see Table 4-10). Those with shorter episodes were more likely to have been hospitalized. About 63 percent with short or medium episodes had been hospitalized within 30 days of their first home health visit, compared with only half of those with very long episodes.[13]

Home health care use also varied for different types of beneficiaries, with the oldest old consuming a disproportionate share of services. Only 10 percent of all Medicare beneficiaries were 85 or older, yet they received 21 percent of all visits. This age group was responsible for about a quarter of all continuous episodes, but only 19 percent of short ones. Across episodes, the disabled also accounted for a larger share of continuous episodes than other types.

Agency Differences—Home health services are provided by both free-standing and facility-based agencies. Almost half of all providers are free-standing proprietary agencies, while 7 percent are free-standing agencies operated by Visiting Nurse Associations (VNAs). About 27 percent of agencies are based in hospitals and other facilities (such as SNFs or rehabilitation facilities); 15 percent are government-affiliated.

Patterns of care differ across agency types. In fiscal year 1994, free-standing proprietary agencies were more likely to treat patients who had longer episodes of care (see Table 4-11). Those agencies provided 31 percent of the short episodes but 45 percent of continuous ones. Government-affiliated agencies also were more likely to serve patients having longer episodes of care: They provided 9 percent of short episodes but 14 percent of the continuous

Table 4-9. Distribution of Home Health Visits, by Episode Category, Fiscal Year 1994 (In Percent)

Episode Category	Share of All Episodes	Share of Visits		
		All	Skilled Nursing	Home Health Aide
Short	22.2%	3.5%	5.0%	1.5%
Medium	27.5	15.4	17.9	9.8
Long	2.7	3.4	3.8	2.6
Very long	2.7	5.2	5.7	4.5
Continuous	9.4	32.7	27.0	42.1
Crossover	35.6	39.9	40.6	39.5

Note: Columns may not sum to 100 percent due to rounding. Short, medium, long, and very long episodes are a series of home health visits preceded and followed by a 60-day period without home health use. Short episodes lasted 30 days or less, medium episodes lasted 31 to 120 days, long episodes lasted 121 to 165 days, and very long episodes lasted 166 to 365 days. Continuous episodes are those without a 60-day service gap; these lasted longer than 14 months. Crossover episodes are those with a 60-day service gap either before the first visit or after the last one, but not both.

SOURCE: ProPAC analysis of a 20 percent sample of home health claims from the Health Care Financing Administration.

Table 4-10. Characteristics of Home Health Care Users, by Episode Category, Fiscal Year 1994 (In Percent)

Characteristic	Episode Category					
	Short	Medium	Long	Very Long	Continuous	Crossover
Age						
<65	7.3%	6.7%	7.5%	7.9%	8.5%	7.5%
65-74	33.6	31.8	29.5	28.7	24.2	28.3
75-84	39.8	41.5	41.8	41.3	41.2	40.9
85+	19.3	20.1	21.2	22.2	26.2	23.3
Disabled	6.4	6.0	6.8	6.9	8.1	6.8
Prior hospital stay within 30 days	63.3	63.6	55.2	49.1	—	—

Note: Percentages in columns may not sum to 100 due to rounding. Short, medium, long, and very long episodes are a series of home health visits preceded and followed by a 60-day period without home health use. Short episodes lasted 30 days or less, medium episodes lasted 31 to 120 days, long episodes lasted 121 to 165 days, and very long episodes lasted 166 to 365 days. Continuous episodes are those without a 60-day service gap; these lasted longer than 14 months. Crossover episodes are those with a 60-day service gap either before the first visit or after the last one, but not both.

SOURCE: ProPAC analysis of a 20 percent sample of home health claims from the Health Care Financing Administration.

ones. Hospital-based agencies, on the other hand, were associated with a larger share of short episodes—38 percent compared with 25 percent of continuous episodes. A previous ProPAC analysis found that agency types also differed in the proportion of episodes preceded by an acute hospitalization. Proprietary free-standing agencies were the least likely to treat patients who had been hospitalized, whereas hospital-based agencies were the most likely to do so.[14]

Substantial cost differences also are seen across types of home health agencies. In an analysis of 1994 agency costs, ProPAC found that VNA agencies generally had lower per visit costs than other agencies (see Table 4-12). Size (as measured by the volume of Medicare-covered visits provided) also was an important predictor of costliness. As agency size increased, the per visit costs for skilled nursing, physical therapy, and aide services decreased. The variation found among agencies may occur because they have different practice protocols or care for different types of patients. Alternatively, the high costs of some agencies may be partly due to cost allocation practices: Overhead costs for facility-based agencies, for instance, may have been allocated to the home health agency from another part of the institution.

Medicare pays home health agencies based on their costs, subject to limits applied to aggregate agency costs for each visit type. That allows agencies to cross-subsidize between visit types. For example, an agency whose per visit physical therapy

Table 4-11. Distribution of Home Health Episodes, by Type of Agency, Fiscal Year 1994 (In Percent)

Agency Type	Share of All Episodes	Episode Category					
		Short	Medium	Long	Very Long	Continuous	Crossover
Hospital-based	32.9%	38.1%	35.3%	31.8%	31.3%	24.7%	30.3%
Visiting Nurse Association	19.8	20.6	21.4	21.0	18.7	16.5	19.0
Free-standing proprietary	36.5	31.4	33.6	36.8	39.7	44.7	39.5
Government	10.0	9.1	8.9	9.6	9.5	13.6	10.4
Other*	0.8	0.8	0.8	0.8	0.7	0.7	0.7

Note: Columns may not sum to 100 percent due to rounding. Short, medium, long, and very long episodes are a series of home health visits preceded and followed by a 60-day period without home health use. Short episodes lasted 30 days or less, medium episodes lasted 31 to 120 days, long episodes lasted 121 to 165 days, and very long episodes lasted 166 to 365 days. Continuous episodes are those without a 60-day service gap; these lasted longer than 14 months. Crossover episodes are those with a 60-day service gap either before the first visit or after the last one, but not both.

* Includes agencies based in rehabilitation and skilled nursing facilities.

SOURCE: ProPAC analysis of a 20 percent sample of home health claims from the Health Care Financing Administration.

Table 4-12. Average Home Health Agency Costs Per Visit, by Type of Agency, 1994

Agency Type	Skilled Nursing	Physical Therapy	Occupational Therapy	Speech Pathology	Medical Social Services	Home Health Aide
All home health agencies	$83.61	$90.47	$77.38	$88.15	$119.79	$38.65
Urban	80.99	87.73	81.38	86.59	120.33	38.72
Rural	92.22	99.49	64.21	93.28	118.01	38.42
Large	80.68	88.04	80.30	90.83	126.42	38.15
Medium	88.20	96.57	74.51	85.31	113.80	38.33
Small	98.42	98.95	59.72	72.37	78.94	43.03
High share of aide visits	82.37	89.43	74.29	87.30	118.65	37.47
Low share of aide visits	86.14	92.59	83.70	89.90	122.13	41.08
Visiting Nurse Association	71.57	68.33	69.77	73.71	109.36	39.54
Other free-standing	81.56	91.17	79.08	89.37	119.39	37.39
Facility-based	96.40	104.53	79.12	95.12	127.96	40.71
Voluntary	84.28	86.33	76.48	86.74	123.21	39.72
Proprietary	82.06	95.23	82.70	92.41	122.29	37.49
Government	87.70	88.74	55.93	74.67	89.68	38.77

Note: Agencies with a high share of aide visits were those in which 40 percent or more of visits were from aides. Small agencies provided fewer than 12,500 Medicare-covered visits annually. Large agencies provided more than 25,000 visits annually. To account for differences in input prices, costs were standardized using the hospital wage index.

SOURCE: ProPAC analysis of Cycle 12 home health agency cost reports from the Health Care Financing Administration.

costs are high relative to the limit may be able to offset those losses by keeping its per visit costs for other types of services below the cost limits. The ability of agencies to do that, however, is constrained somewhat by the relative volume of different services. Because home health patients require a comparatively large number of skilled nursing and aide visits, agencies must control costs for these services to do well financially under Medicare.

Indeed, ProPAC found that free-standing agencies not associated with VNAs, which had low costs for aide visits, had the highest Medicare payment to cost ratios compared with VNA and facility-based agencies (see Table 4-13). Proprietary providers, which also had low aide costs, performed better than voluntary and government-affiliated ones. Small agencies as a group could not overcome their high aide and skilled nursing costs and therefore had lower payment to cost ratios than larger ones. Agencies that furnished a high proportion of aide visits relative to other types of visits also performed well.

These numbers mask wide variation in financial performance within agency types, however. ProPAC estimates that 29 percent of home health agencies exceeded their cost limits in 1994. Small agencies were far more likely to exceed their cost limits than larger agencies. In fact, almost 19 percent of small agencies had costs that were 120 percent of their payment limits, compared with less than 2 percent of large agencies. Only 10 percent of VNAs exceeded their cost limits, compared with 21 percent of other free-standing agencies and 45 percent of facility-based ones. Indeed, more than 60 percent of VNA agencies had costs that were less than 80 percent of their limits, compared with only 20 percent of facility-based agencies.

Rehabilitation Hospitals and Units and Long-Term Care Hospitals

Rehabilitation hospitals and rehabilitation distinct-part units within general acute care hospitals provide intensive physical, occupational, and speech therapy to patients with functional disabilities resulting from physical illness or injury. Medicare certification rules require that at least 75 percent of the patients served by rehabilitation facilities receive care for one or more of 10 specified conditions related to neurological and musculoskeletal disorders and burns.[15] In general, beneficiaries treated in these facilities must

Table 4-13. Home Health Agency Payment to Cost Ratios and the Percentage of Agencies Whose Costs Exceeded Their Payment Limits, by Type of Agency, 1994

Agency Type	Payment to Cost Ratio	Percentage Over Payment Limits
All home health agencies	0.94	28.8%
Urban	0.94	27.8
Rural	0.93	36.5
Large	0.95	14.4
Medium	0.94	21.3
Small	0.89	41.3
High share of aide visits	0.95	24.3
Low share of aide visits	0.93	35.2
Visiting Nurse Association	0.93	9.6
Other free-standing	0.96	21.3
Facility-based	0.91	45.1
Voluntary	0.93	33.0
Proprietary	0.96	23.4
Government	0.93	30.1

Note: Agencies with a high share of aide visits were those in which 40 percent or more of visits were from aides. Small agencies provided fewer than 12,500 Medicare-covered visits annually. Large agencies provided more than 25,000 visits annually. To account for differences in input prices, costs were standardized using the hospital wage index.

SOURCE: ProPAC analysis of Cycle 12 home health agency cost reports from the Health Care Financing Administration.

receive at least three hours of therapy daily during their stay.

A long-term care hospital is any Medicare-participating hospital with an average length of stay exceeding 25 days that is not otherwise classified as a rehabilitation or psychiatric hospital. Long-term care hospitals are a heterogeneous group, providing a diverse mix of comprehensive rehabilitation, chronic respiratory care, and pain and wound management services.

Medicare coverage for inpatient services in rehabilitation hospitals and distinct-part units and in long-term care hospitals is included under the basic Part A hospital benefit. After meeting the deductible for the first admission per benefit period ($760 in 1997), the beneficiary is responsible for daily copayments (one-fourth of the deductible) from the sixty-first through the ninetieth day. After 90 days, the beneficiary pays all hospital costs. Each enrollee, however, is entitled to an additional lifetime reserve of 60 days to cover extended hospitalizations. The daily copayment for lifetime reserve days is one-half of the deductible.

Medicare payments to inpatient rehabilitation facilities and long-term care hospitals are made in accordance with the rules established under the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA). Payments for inpatient operating costs are based on each provider's current Medicare-allowable inpatient operating costs or a facility-specific limit, known as its ceiling. Each provider's ceiling equals its target amount (its base-year costs per discharge updated to the current year) times its current volume of Medicare discharges. Providers with costs below the ceiling receive their costs plus an incentive payment, which is half the difference between their costs and ceiling or 5 percent of the ceiling, whichever is less. Those with costs above the limit receive the ceiling amount plus half the difference between their costs and limit, up to 110 percent of the ceiling. Facilities may receive additional payments through an exceptions process. Medicare-allowable inpatient capital costs are paid in their entirety.

Recently, interest in either replacing or substantially reforming the TEFRA payment system has gained momentum. The Congress originally intended it to be a temporary solution to curb rapidly rising Medicare expenditures until prospective payment systems could be put in place. Such systems have not been implemented for rehabilitation facilities and long-term care hospitals, however, and they have remained under TEFRA for much longer than anticipated.[16] Because TEFRA was not designed and is not suited for prolonged application, it has had several undesirable effects.

Aggregate Medicare spending for these providers has continued to accelerate. Total payments to rehabilitation facilities and long-term care hospitals increased annually by 22 percent and 30 percent, respectively, from 1986 to 1994 (see Table 4-14). In 1994 alone, payments to long-term care hospitals jumped by 60 percent. Growth in the number of Medicare discharges contributes to higher spending. From 1986 to 1994, discharges from rehabilitation facilities and

Table 4-14. Estimated Medicare Rehabilitation and Long-Term Care Facility Payments and Discharges, Fiscal Years 1986-1994

Year	Payments (In Billions)		Discharges (In Thousands)	
	Rehabilitation	Long-Term Care	Rehabilitation	Long-Term Care
1986	$0.8	$0.1	90	14
1987	1.0	0.1	105	14
1988	1.2	0.2	121	15
1989	1.4	0.2	135	17
1990	1.9	0.2	172	17
1991	2.4	0.2	207	19
1992	3.1	0.3	234	21
1993	3.7	0.5	262	27
1994	3.9	0.8	288	36
Average Annual Increase	21.9%	29.7%	15.6%	12.5%

Note: Payments include both program payments and beneficiary liabilities.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

long-term care hospitals increased annually by 16 percent and 13 percent, respectively. But much of the increase in expenditures is related to the entrance of more and more new providers into the market.

Each provider's TEFRA limit is based on its own costs in a base year. For those in existence at the time TEFRA was implemented, that base year is fiscal year 1982. For all others, it is either their second full cost reporting period (for hospitals) or their first full cost reporting year (for units). New providers, therefore, have the opportunity to inflate their initial operating costs and thus establish high target amounts. As patient volume increases after the initial start-up period—which frequently occurs for new facilities—fixed costs are spread over a larger patient base, keeping costs per discharge below the provider's target amount. Correspondingly, the ability to receive incentive payments and thus make a profit is high. Older facilities do not have this opportunity, however, and have had to operate under the annual update constraint for much longer. Thus, new providers have a distinct financial advantage under TEFRA.

ProPAC compared the financial performance of new rehabilitation facilities and long-term care hospitals (those that entered the TEFRA payment system in fiscal year 1990 and after) with that of old ones (those first subject to TEFRA in fiscal year 1989 and before). This analysis found that new rehabilitation units and long-term care hospitals had higher costs, Medicare payments, and payments relative to costs compared with old ones. For long-term care hospitals, the difference in payment to cost ratios was especially large. For rehabilitation hospitals, though, there was no difference.

Overall, rehabilitation hospitals and units perform relatively well from a financial standpoint. In aggregate, TEFRA payments for these facilities have consistently been about equal to or above their Medicare costs in recent years (see Table 4-15). Only 9 percent of rehabilitation hospitals and 21 percent of rehabilitation units had inpatient operating costs per case that exceeded their target amount in fiscal year 1994. By contrast, aggregate payments for long-term care hospitals have consistently been below their costs. The ratio of payments to costs is rising, however, and the fraction of long-term care hospitals whose costs exceed their target amounts is decreasing, as newer providers with higher base-year target amounts account for a growing share of the total.

Other Providers of Post-Acute Care

Though many other health care providers—among them hospices, hospital outpatient departments, outpatient rehabilitation providers, and independent therapists—deliver post-acute care to Medicare beneficiaries, they traditionally are not regarded as post-acute care providers. That is because some furnish other types of services, including primary, acute, and chronic care, and others are relative newcomers to

Table 4-15. TEFRA Payment to Cost Ratios and the Percentage of Facilities Whose Costs Exceeded Their Target Amount, Fiscal Years 1990-1994

	Rehabilitation Hospitals		Rehabilitation Units		Long-Term Care Hospitals	
Year	Ratio	Percentage Over Target Amount	Ratio	Percentage Over Target Amount	Ratio	Percentage Over Target Amount
1990	0.98	24%	0.93	50%	0.78	54%
1991	0.99	19	0.95	40	0.77	51
1992	1.03	15	0.98	33	0.86	45
1993	1.04	12	1.00	30	0.90	37
1994	1.05	9	1.02	21	0.93	22

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

the industry. Nevertheless, the number of these providers is growing. As a result, any efforts to control Medicare post-acute care spending aimed only at inpatient institutions, such as SNFs and rehabilitation hospitals, and at home health agencies may be weakened in view of the increasing ability to shift care to alternative providers.

Hospices—Hospices are hospital-based or freestanding institutions or home health agencies that primarily furnish palliative and supportive services like pain relief, symptom management, and bereavement and other counseling services to the terminally ill. Medicare's hospice benefit covers these services and up to five days of continuous inpatient respite care for any beneficiary who is certified by a physician as being terminally ill and having a maximum life expectancy of six months. Once the beneficiary elects the hospice benefit, standard Part A and Part B benefits are forfeited.

Medicare pays per diem rates for hospice care according to whether services are classified as routine home care, continuous home care, inpatient respite care, or general inpatient care. Total payments may not exceed an annual cap per beneficiary, which was $13,974 in fiscal year 1996. There is no beneficiary liability except for minimal coinsurance for outpatient drugs and respite care. Medicare hospice expenditures have grown substantially in recent years from $532.8 million in fiscal year 1991 to $1.9 billion in fiscal year 1995.[17] The number of beneficiaries receiving hospice care climbed by 150 percent from 122,058 to 309,336 during the same period.

Hospital Outpatient Departments—Hospital outpatient departments provide a variety of ambulatory services, including post-acute care therapies. These services may be delivered on site, or the hospital may contract out its services to other post-acute care providers, such as skilled nursing facilities. Medicare does not limit the number of services beneficiaries receive from hospital outpatient providers.

The program pays for hospital outpatient services under Part B. The facility component of most evaluation and management visits and therapy and rehabilitation services is reimbursed based on the facility's reasonable costs or customary charges. In addition to the annual Part B deductible, the beneficiary is responsible for 20 percent of the hospital's charges.

Outpatient Rehabilitation Providers—Several types of organizations, generally classified as outpatient rehabilitation providers, furnish a broad array of diagnostic, therapeutic, and restorative services to Medicare beneficiaries. Comprehensive outpatient rehabilitation facilities operate intensive, multidisciplinary medical rehabilitation programs. Medicare's CORF benefit was established so that beneficiaries could receive coordinated therapy services at one site. Medicare coverage thus includes physician and nursing services; physical, occupational, speech, and respiratory therapy; social and psychological counseling; orthotic and prosthetic devices; medical supplies and durable medical equipment; certain drugs and biologicals; and one home evaluation. CORFs are also required to provide physical, occupational, and speech therapy in off-site locations, including patients' homes.

Beneficiaries may receive medical rehabilitation from three other types of outpatient therapy

providers—clinics, other rehabilitation agencies, and public health agencies. These providers furnish similar services, but some structural differences exist. Rehabilitation agencies operate multidisciplinary and integrated rehabilitation programs, whereas clinics are groups of three or more physicians, and public health agencies are state or local governmental organizations that provide environmental or preventive services and therapeutic care. Under certain circumstances, a home health agency may also qualify as an outpatient therapy provider. The major difference between rehabilitation agencies and CORFs is that rehabilitation agencies are not required to provide physician and social services on site.

In addition to the annual Part B deductible, beneficiaries are responsible for coinsurance equal to 20 percent of these providers' charges. For the most part, Medicare payments are based on providers' costs. CORFs receive 80 percent of reasonable costs or reasonable costs minus the beneficiary liability, whichever is less. Outpatient therapy providers receive 80 percent of reasonable costs, 80 percent of charges, or reasonable costs minus the beneficiary coinsurance, whichever is least.

Independent Therapists—Physical and occupational therapists may treat Medicare beneficiaries outside the administrative or professional control of an institutional provider in their own office, in patients' homes, and sometimes in a facility. In these cases, the therapist bills Medicare directly and is paid under Part B.

Independent therapists are paid for each procedure performed in accordance with Medicare's physician fee schedule, which is based on a resource-based relative value scale. The program pays 80 percent of the fee schedule amount and beneficiaries pay the rest. Medicare-participating therapists agree to accept this amount as payment in full. Nonparticipating therapists, by contrast, can charge up to 115 percent of the fee, and the beneficiary is responsible for the additional amount. Medicare limits payments to $900 per beneficiary per year for each type of therapy.

Other Providers—Physicians (doctors of medicine and osteopathy, podiatrists, and chiropractors) may provide therapy in their offices or hire physical or occupational therapists to do so.[18] The care provided by a therapist in a physician's office is considered part of the physician's services and is not reimbursed separately. Medicare pays for 80 percent of physician services based on its fee schedule. Beneficiaries pay the remainder, up to 115 percent of the fee schedule amount.

Regional Variation in Supply and Use

Both the supply of post-acute care providers and Medicare beneficiaries' use of post-acute care vary widely across the country. In 1996, the percentages of all Medicare-certified skilled nursing facilities located in the New England, East North Central, West North Central, and West South Central regions were higher than the shares of beneficiaries living in those areas (see Table 4-16). The shares of SNFs and beneficiaries in the East South Central and Mountain regions were about the same, whereas the supplies of SNFs in the remaining regions were lower relative to the number of beneficiaries in those areas. Rehabilitation hospitals and units, home health agencies, and hospices were more prevalent in the western regions and less prevalent on the East Coast, compared with the distribution of beneficiaries. Overall, the supply of post-acute care providers relative to beneficiaries was largest in the West South Central region and smallest in the Middle Atlantic.

Although many factors influence post-acute care use, it often corresponds with provider availability. In fiscal year 1995, the West South Central region, which had the most providers relative to the number of resident beneficiaries overall, had the highest rehabilitation facility admission and home health use rates and ranked second in admissions to long-term care hospitals (see Table 4-17). States in the West North Central had the greatest supply of SNFs relative to beneficiaries and the highest SNF admission rate. New England, which had more SNFs and long-term care hospitals relative to its beneficiary population, also had high use rates for these facilities. States in the Pacific region had comparatively few providers and correspondingly below-average use rates. However, although the supply of post-acute care providers in the Middle Atlantic region also was low, use rates for rehabilitation facilities and long-term care hospitals were at or above the national average.

Table 4-16. Distribution of Beneficiaries and Medicare-Certified Post-Acute Care Providers, by Census Division, 1996 (In Percent)

Division	Medicare Beneficiaries	Skilled Nursing Facilities	Rehabilitation Hospitals and Units	Long-Term Care Hospitals	Home Health Agencies	Hospices	Outpatient Rehabilitation Providers	Comprehensive Outpatient Rehabilitation Facilities
New England	5.6%	7.7%	3.7%	14.1%	4.4%	5.8%	3.6%	4.0%
Middle Atlantic	16.0	11.8	13.8	8.7	6.7	10.0	10.1	12.2
South Atlantic	18.8	15.1	13.4	14.1	11.4	14.3	29.4	43.2
East North Central	16.9	18.3	19.3	10.3	14.5	16.2	17.3	7.4
East South Central	6.5	6.6	5.2	3.8	6.1	8.0	6.4	11.4
West North Central	7.6	11.7	8.8	4.9	11.3	12.3	7.8	5.0
West South Central	9.7	11.2	18.6	30.8	27.4	13.4	10.8	9.4
Mountain	5.3	5.4	6.3	6.5	7.8	7.9	5.8	3.0
Pacific	13.5	12.3	11.0	7.0	10.5	12.2	8.8	4.5

SOURCE: Health Care Financing Administration, Office of Survey and Certification and Bureau of Data Management and Strategy.

IMPLICATIONS FOR PAYMENT REFORM

Post-acute care spending is the fastest growing component of Medicare program outlays. Driving this rapid rise is the burgeoning use of services, some of which is the intended effect of changes in the payment environment and responses to those changes. Medicare's prospective payment system, for example, gives acute care hospitals an incentive to shorten lengths of stay and move some services to other sites. Hospitals are able to do this because of the continuous spread of medical and surgical advances that broaden clinical treatment options outside of acute inpatient settings. Use is apt to climb further as Medicare enrollment expands and as the oldest old and disabled beneficiaries, who are most likely to need post-acute care, account for an increasing share of the total.

Over the last decade, however, beneficiaries' use of post-acute care has accelerated beyond reasonable expectations, largely because of Medicare's own post-acute care policies. First, specific changes in law, together with court-ordered administrative changes, expanded Medicare's SNF and home health care benefits and weakened HCFA's ability to control use. In addition, ill-defined coverage guidelines have been open to interpretation and thus hard to enforce, further restricting administrative controls over use.

Table 4-17. Post-Acute Care Provider Use, by Census Division and Provider Type, Fiscal Year 1995

Census Division	Discharges Per 1,000 Beneficiaries			Home Health Visits Per 1,000 Beneficiaries
	Skilled Nursing Facility	Rehabilitation Facility	Long-Term Care Hospital	
National	43.5	8.8	1.2	6,127.4
New England	55.0	8.0	5.1	7,710.1
Middle Atlantic	34.7	11.1	1.1	3,150.0
South Atlantic	35.8	7.3	0.8	5,623.1
East North Central	48.0	9.1	0.7	4,399.3
East South Central	39.4	9.8	0.6	11,242.5
West North Central	61.8	7.5	0.6	3,080.0
West South Central	48.2	15.0	2.5	18,804.0
Mountain	43.2	7.9	0.8	3,884.6
Pacific	42.4	4.2	0.4	2,674.9

Note: These counts underestimate total use because they do not include the services delivered to Medicare beneficiaries enrolled in managed care plans.

SOURCE: ProPAC analysis of MedPAR and home health claims data from the Health Care Financing Administration.

Second, Medicare continues to employ cost-based reimbursement on a fee-for-service basis for the vast majority of post-acute care. Cost-based reimbursement offers few financial incentives for providers to control their costs because lower costs result in correspondingly lower payments. Fee-for-service payment methods encourage greater use of services, since revenues depend directly on the quantity of services furnished. Moreover, payment policies are not consistent, so the amounts paid for comparable services provided to similar patients may differ across settings. This, in turn may inappropriately influence site-of-care decisions. Together, Medicare's post-acute care policies have led to substantial growth in the supply of providers, in the number of beneficiaries using services, and in the amount of services furnished to each user.

At the same time, the overlap in service delivery among post-acute care providers allows for the substitution of services across settings and the unbundling of services to other providers during an episode of care. Consequently, higher spending for post-acute care may be caused by the use of multiple providers during the course of treatment and the provision of more services than are medically necessary. This problem will persist if provider-specific payment policies are retained, even if current reimbursement mechanisms are replaced with prospective payment systems for a bundle of services furnished during a day or an admission. Moreover, prospective payment systems create financial incentives for providers to cut costs by reducing the number of services furnished per bundle, which could result in substandard care.

To improve the coordination of services across providers and contain post-acute care spending in the long run, Medicare will have to make comprehensive structural changes to its benefit and payment policies. Ideally, payments should be the same for patients with similar needs, regardless of sites of care. But this objective is hard to achieve without better knowledge of the patients treated in different facilities, their needs, and the services they receive.

Attaining this knowledge requires tools that currently are not available. There is no consensus on appropriate patterns of care within episodes of illness, and, in fact, what constitutes an episode is not well-defined. Further research is needed to better understand how to measure resource requirements for patients who use post-acute care and how to evaluate the outcomes of that care. There is some evidence that the services provided and the beneficiaries treated in various settings overlap, yet there are certain distinctions as well. Until these similarities and differences can be described more precisely and their implications for the quality of care determined, the underpinnings of payment policy changes—the unit of payment and the appropriate payment rate—cannot be set.

Efforts to develop patient classification systems and other tools necessary to understand resource use in post-acute care settings are ongoing. In some areas, progress has been substantial. As these tools are refined, patterns of care and costs will be better understood. This knowledge will permit decision makers to craft incremental improvements in payment policies for specific services or types of providers. Over the long term, these steps could eventually lead to a more comprehensive approach that would benefit Medicare beneficiaries and the program itself.

Notes to Chapter 4

1. A benefit period begins on the first day of an inpatient hospital stay and ends 60 days after the beneficiary is discharged from the hospital or from another inpatient facility providing skilled nursing or rehabilitative services. There is no limit to the number of benefit periods a beneficiary may have.

2. Ancillary services provided by a SNF (or under arrangement by another entity for the SNF) are reimbursed on a facility-specific cost basis under Part A. If a SNF does not furnish certain ancillary services to its patients either directly or under arrangement, an external supplier (such as a rehabilitation agency, independent therapist, full service SNF, or hospital outpatient department) is permitted to furnish services and submit claims directly to Medicare under Part B.

3. The class action lawsuit challenged the authority of the Medicare program to use administrative means to determine which beneficiaries were entitled to SNF services and to limit the amount and duration of therapy services. In *Fox v. Bowen*, 656 F. Supp. 1236 (D. Conn. 1986), the court held that the Secretary's rules denying physical therapy benefits delivered by SNFs violated the Medicare statute and regulations and the due process clause of the U.S. Constitution.

4. Prospective Payment Assessment Commission, *Medicare and the American Health Care System, Report to the Congress, June 1996* (Washington, DC: ProPAC, 1996).

5. Katie Merrell, David C. Colby, and Christopher Hogan, "Medicare Beneficiaries Covered by Medicaid Buy-In Agreements," *Health Affairs* 16(1):175-84, January/February 1997.

6. Medicare pays for an unlimited number of home health visits as long as patients continue to need skilled nursing care or physical, speech, or occupational therapy.

7. Patients receiving durable medical equipment and osteoporosis drugs from home health agencies are subject to 20 percent coinsurance for these services.

8. The vast majority of home health services are paid under Part A. However, beneficiaries who are not eligible for Part A but are enrolled in Part B may receive home health services under Part B.

9. This estimate includes both Part A and Part B expenditures for home health services. In 1996, more than 98 percent of Medicare's total spending for home health services was provided under Part A.

10. Beneficiaries who did not qualify for Part A coverage because they were not enrolled in Part A, they had exhausted their Part A coverage, or they did not have a prior hospitalization could receive up to 100 home health visits under Part B.

11. The Secretary's policy stated that, to be eligible for Medicare's home health benefit, patients must need care on both a part-time (fewer than eight hours per day) and an intermittent (four or fewer days per week) basis. In *Duggan v. Bowen*, 691 F. Supp. 1487 (D.D.C. 1988), the court held that this policy was contrary to the plain language of the Medicare provisions in the Social Security Act (which required that care must be needed on either a part-time or an intermittent basis) and was promulgated in violation of the Administrative Procedures Act.

12. Prospective Payment Assessment Commission, *Medicare and the American Health Care System, June 1996.*

13. Due to data limitations, it was not possible to determine the beginning of the episodes for continuous users and many of the crossover users, so prior hospitalizations could not be identified.

14. Prospective Payment Assessment Commission, *Medicare and the American Health Care System, June 1996.*

15. The 10 conditions are stroke; spinal cord injury; congenital deformity; amputation; major multiple trauma; hip fracture; brain injury; polyarthritis (including rheumatoid

arthritis); neurological disorders (including multiple sclerosis, muscular dystrophy, Parkinson's disease); and burns. 42 C.F.R. §412.23(b)(2).

16. For a detailed discussion of this issue, see Prospective Payment Assessment Commission, *Report and Recommendations to the Congress, March 1997* (Washington, DC: ProPAC, 1997).

17. Health Care Financing Administration, Bureau of Data Management and Strategy.

18. The only chiropractic service Medicare covers is manual spinal manipulation to correct a subluxation (partial dislocation) that is documented by X-ray and for which manual manipulation is an appropriate treatment. 42 C.F.R. §410.22(b).

Appendixes

Appendix A. Health Spending and Financing

This appendix provides detailed data to supplement several of the tables and graphs found in Chapter 1. The first three tables furnish absolute values relating to the percentage changes presented in the first section of the chapter, entitled "National Health Spending Trends." Data are included for each year from 1980 through 1995. Table A-1 shows total and per capita national health spending, in both nominal and real form. Table A-2 breaks the aggregate nominal data down by sector, and Table A-3 disaggregates the data by source of payment.

The next two tables present detailed data for the second section of the chapter, called "Medicare and Other Payers." Table A-4 compares the annual real change in per capita spending for Medicare and private insurers, covering the period of 1980 through 1995. These data include personal health expenditures and administrative costs and omit out-of-pocket expenses as well as public health, research, and construction costs. Table A-5 provides hospital payment to cost ratios for Medicare, Medicaid, and private insurers for each year from 1985 through 1995.

Table A-1. Total and Per Capita National Health Spending, 1980-1995

Year	Total (In Billions)		Per Capita	
	Nominal	Real*	Nominal	Real*
1980	$247.2	$457.8	$1,052	$1,948
1981	286.9	485.2	1,205	2,039
1982	322.9	514.8	1,346	2,145
1983	355.2	543.5	1,468	2,246
1984	389.7	571.7	1,591	2,333
1985	428.2	606.5	1,734	2,455
1986	460.9	640.9	1,844	2,563
1987	500.1	670.9	1,985	2,662
1988	559.6	720.9	2,194	2,827
1989	622.0	764.5	2,420	2,975
1990	697.5	813.3	2,683	3,128
1991	761.7	852.3	2,896	3,241
1992	834.2	906.2	3,148	3,420
1993	892.1	940.8	3,329	3,511
1994	937.1	963.7	3,471	3,569
1995	988.5	988.5	3,621	3,621

* Adjusted by the consumer price index for all urban consumers (CPI-U-X1).

SOURCE: Health Care Financing Administration, Office of the Actuary. Population estimates from the Social Security Administration.

Table A-2. National Health Spending, by Sector, 1980-1995 (In Billions)

Sector	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Hospitals	$102.7	$119.9	$136.2	$147.6	$157.6	$168.3	$179.8	$194.1	$211.6	$231.6	$256.4	$282.3	$305.4	$323.3	$335.0	$350.1
Community	85.6	100.9	115.5	125.9	134.4	143.4	153.2	165.8	181.6	199.1	221.6	245.5	267.9	284.9	296.3	311.3
Inpatient	74.4	87.5	99.9	108.2	114.1	119.2	125.2	133.4	143.5	155.1	169.2	183.5	196.5	206.4	210.4	216.6
Outpatient	11.2	13.5	15.6	17.7	20.3	24.2	28.1	32.4	38.1	44.1	52.4	62.0	71.4	78.5	85.9	94.7
Other	17.1	18.9	20.6	21.6	23.2	25.0	26.6	28.3	29.9	32.5	34.9	36.8	37.5	38.4	38.6	38.8
Non-community[a]	8.1	9.0	9.8	10.2	10.9	11.7	12.6	13.6	14.7	16.1	17.0	17.1	16.8	16.3	16.0	15.6
Federal[b]	9.0	9.9	10.8	11.4	12.3	13.3	14.0	14.7	15.2	16.4	17.9	19.7	20.7	22.1	22.6	23.2
Nursing facilities	17.6	20.2	22.8	25.5	27.9	30.7	33.5	36.3	39.8	44.9	50.9	57.2	62.3	67.0	72.4	77.9
Home health agencies	2.4	3.0	3.6	4.3	5.1	5.6	6.4	6.7	8.4	10.2	13.1	16.1	19.6	23.0	26.3	28.6
Physicians	45.2	52.2	57.7	64.6	72.6	83.6	93.1	104.1	118.7	131.3	146.3	159.2	175.7	182.7	190.6	201.6
Other	79.3	91.7	102.8	113.2	126.6	140.0	148.1	158.9	181.1	204.0	230.6	247.0	271.2	296.2	312.8	330.3
Other personal health care[c]	49.1	56.8	63.1	69.5	78.3	88.2	97.7	108.5	120.8	132.1	147.8	161.9	177.5	191.0	203.6	220.6
All other spending[d]	30.2	34.9	39.7	43.7	48.3	51.8	50.4	50.4	60.3	71.9	82.8	85.1	93.7	105.2	109.2	109.7

[a] Includes patient care spending in non-community hospitals (long-term and psychiatric).

[b] Includes patient care spending in Federal hospitals (Departments of Defense and Veterans Affairs and Public Health Service).

[c] Includes dental services, other professional services, drugs and other medical non-durables, vision products, and other medical durables.

[d] Includes research, construction, public health activities, administration of public programs, and net cost of private health insurance.

SOURCE: Health Care Financing Administration, Office of the Actuary.

Table A-3. National Health Spending, by Payment Source, 1980-1995 (In Billions)

Payment Source	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Total	$247.2	$286.9	$322.9	$355.2	$389.7	$428.2	$460.9	$500.1	$559.6	$622.0	$697.5	$761.7	$834.2	$892.1	$937.1	$988.5
Medicare	37.5	44.9	52.5	59.8	66.5	72.2	76.9	82.6	90.4	102.5	112.1	123.0	138.3	150.9	167.6	187.0
Medicaid	26.1	30.4	32.1	35.3	38.3	41.2	45.5	50.4	55.1	62.2	75.4	94.0	106.4	119.8	130.0	141.0
Other government programs[a]	41.1	45.9	50.0	52.5	55.4	60.9	67.5	74.1	80.9	87.5	96.9	103.2	110.8	115.8	122.3	128.4
Private	142.5	165.7	188.4	207.7	229.6	253.9	271.0	293.0	333.1	369.8	413.1	441.4	478.8	505.5	517.3	532.1
Health insurance[b]	69.7	82.1	95.3	106.1	118.8	132.3	140.1	152.1	175.1	203.8	232.4	252.3	277.0	295.4	302.7	310.6
Out-of-pocket[c]	60.3	68.5	75.5	82.3	90.8	100.6	108.0	116.0	129.2	136.2	148.4	155.0	165.8	171.6	176.0	182.6
Other[d]	12.5	15.0	17.5	19.3	19.9	21.1	22.8	24.9	28.9	29.9	32.3	34.1	36.0	38.5	38.6	38.9

Note: Columns may not sum to total due to rounding.

[a] Includes Departments of Defense and Veterans Affairs; Public Health Service; Federal research; Federal, state, and local workers' compensation; subsidies to hospitals; and public health activities.

[b] Includes premiums paid by employers or unions, employees' share of employer- or union-sponsored premiums, and premiums paid by people with individual policies.

[c] Includes all payments (other than premiums) by individuals, such as deductibles and copayments required by private insurers and public programs when not covered by supplemental insurance.

[d] Includes industrial in-plant health services, private donations, other provider non-patient revenues, and privately financed construction.

SOURCE: Health Care Financing Administration, Office of the Actuary.

Table A-4. Average Annual Real Growth in Per Capita Medicare and Private Health Insurance Spending, by Sector, 1980-1995 (In Percent)

Years	Payer	Hospital	Nursing Facility	Home Health Agency	Physician	Other
1980	Medicare	8.2%	-2.9%	5.9%	8.4%	2.9%
	Private payers	3.0	21.2	15.8	5.8	-4.5
1981	Medicare	8.1	-1.0	17.2	6.8	7.6
	Private payers	4.9	16.6	-3.3	5.2	10.6
1982	Medicare	8.8	1.8	20.4	11.4	4.8
	Private payers	8.0	27.9	9.5	3.3	14.6
1983	Medicare	6.7	1.7	16.7	12.3	13.7
	Private payers	3.1	24.6	13.6	6.8	10.4
1984	Medicare	5.0	1.5	11.1	5.2	7.1
	Private payers	-0.7	21.1	13.1	8.3	16.9
1985	Medicare	2.6	-2.6	-3.4	7.0	13.3
	Private payers	1.1	24.0	9.9	13.0	10.0
1986	Medicare	1.1	-6.0	-7.3	10.6	5.9
	Private payers	3.4	23.2	18.0	8.0	-3.5
1987	Medicare	0.3	1.0	-7.4	10.0	4.2
	Private payers	5.6	19.1	7.4	7.2	-2.6
1988	Medicare	2.5	43.3	3.0	5.3	8.3
	Private payers	3.5	5.8	30.6	10.8	17.5
1989	Medicare	4.7	246.2	17.8	6.1	8.5
	Private payers	7.5	6.6	19.2	7.4	16.9
1990	Medicare	2.0	-35.3	42.0	2.9	7.8
	Private payers	3.1	8.9	11.3	7.6	11.8
1991	Medicare	3.6	12.0	34.2	-1.2	15.3
	Private payers	1.3	3.9	6.3	7.4	1.1
1992	Medicare	9.3	54.4	34.4	-1.0	8.7
	Private payers	1.5	-1.1	9.8	10.4	7.2
1993	Medicare	2.9	39.6	26.2	1.4	8.2
	Private payers	0.4	0.0	3.9	1.2	6.1
1994	Medicare	6.5	24.9	22.5	5.0	5.7
	Private payers	-2.4	5.0	4.1	1.9	-1.9
1995	Medicare	6.3	19.6	13.4	6.2	8.1
	Private payers	-2.5	2.3	-4.1	2.5	-3.6

Note: Real per capita spending is adjusted by the consumer price index for all urban consumers (CPI-U-X1). Spending covers personal health care plus program administration and the net cost of private health insurance.

SOURCE: Health Care Financing Administration, Office of the Actuary.

Table A-5. Hospital Payment to Cost Ratios for Medicare, Medicaid, and Private Payers, 1985-1995 (In Percent)

Payer	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Medicare	101.1%	100.7%	98.2%	94.2%	91.4%	89.2%	88.4%	88.8%	89.4%	96.9%	99.3%
Medicaid	90.4	88.2	83.0	79.7	75.8	79.7	81.6	90.9	93.1	93.7	93.8
Private payers	115.6	115.9	119.9	121.7	121.6	126.8	129.7	131.3	129.3	124.4	123.9

Note: Payment to cost ratios cannot be used to compare payment levels because the mix of services and cost per unit of service vary across payers. They do, however, indicate the relative degree to which payments from each payer cover the costs of treating its patients. The data are for community hospitals and reflect both inpatient and outpatient services. Imputed values were used for missing data. Most Medicare and Medicaid managed care patients are included in the private payers category.

SOURCE: ProPAC analysis of data from the American Hospital Association Annual Survey of Hospitals.

Appendix B. Hospital Payments, Costs, and Margins

This appendix contains data to supplement several of the tables and figures in Chapter 3. This information is discussed in the section on "Trends in Financial Performance." Table B-1 describes the annual changes in hospital operating payments and costs under Medicare's prospective payment system (PPS). Table B-2 and Table B-3 show the annual increases in PPS operating and capital costs, respectively, by hospital group.

The PPS inpatient margin compares combined operating and capital payments with the corresponding Medicare-allowable costs. Table B-4 and Table B-5 portray the patterns of these margins by hospital group and across individual facilities, respectively, over the first 12 years of prospective payment.

Hospitals' overall financial status is indicated by the total hospital margin, which compares total revenues and expenses. Table B-6 contains total margins for each group of hospitals since PPS was implemented, and Table B-7 traces the distribution of total margins across hospitals over that period.

Table B-1. Annual Change in PPS Operating Costs and Payments, 1984-1995 (In Percent)

PPS Year	PPS Costs and Payments						Consumer Price Index[b]
	Operating Costs	Payments	Operating Costs Per Case	Payments Per Case	Market Basket Index	Update Factor[a]	
1984	-4.6	11.1	1.8	18.5	4.9	4.7	4.3
1985	4.7	4.2	11.0	10.5	3.9	4.5	3.7
1986	5.6	-0.6	9.6	3.2	3.9	0.5	2.4
1987	7.4	3.8	9.1	5.4	3.5	1.2	2.9
1988	9.8	6.7	9.0	6.0	4.7	1.5	4.1
1989	10.4	7.7	9.2	6.6	5.5	3.3	4.7
1990	10.7	8.2	8.9	6.5	4.6	4.7	5.1
1991	9.1	8.0	7.0	5.9	4.3	3.4	5.0
1992	6.9	7.4	4.8	5.2	3.1	3.0	3.0
1993	3.5	6.2	1.2	3.8	3.0	2.7	3.1
1994	0.4	5.2	-1.2	3.6	2.4	2.0	2.6
1995	0.2	5.3	-1.1	4.0	3.0	2.0	2.8

Note: Data on costs, payments, and discharges for each PPS year correspond to each hospital's cost reporting period beginning in that Federal fiscal year. Data on the market basket index, the update factor, and the consumer price index are from the corresponding Federal fiscal year. Excludes hospitals in Maryland; includes hospitals in Massachusetts and New York beginning with 1986 and New Jersey beginning with 1989. Changes are based on cohorts of hospitals with cost reports available in each of two consecutive years.

[a] Average update factor for large urban, other urban, and rural hospitals for 1989 through 1995. Update factor for 1990 adjusted for 1.22 percent across-the-board reduction in diagnosis-related group weights.

[b] Consumer price index for all urban consumers.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration and the Bureau of Labor Statistics.

Table B-2. Annual Change in PPS Operating Costs Per Case, by Hospital Group, 1984-1995 (In Percent)

Hospital Group	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
All hospitals	1.8%	11.0%	9.6%	9.1%	9.0%	9.2%	8.9%	7.0%	4.8%	1.2%	-1.2%	-1.1%
Urban	1.6	10.9	9.3	9.0	9.1	9.5	8.4	6.6	4.6	1.0	-1.3	-1.2
Rural	1.5	10.0	9.7	8.5	8.7	8.0	10.4	8.9	5.8	2.3	0.1	-0.1
Large urban	0.6	10.8	9.4	8.6	9.3	9.3	7.8	6.0	3.6	1.5	-1.9	-1.2
Other urban	3.2	11.1	9.5	9.9	8.9	9.9	9.4	7.5	6.1	0.3	-0.5	-1.0
Rural referral	1.5	10.2	9.7	9.2	9.8	9.9	9.6	9.2	4.6	2.1	-0.1	0.3
Sole community	1.3	9.9	8.6	8.0	8.5	7.1	9.4	9.6	4.6	2.6	0.4	1.1
Other rural	1.4	10.0	9.9	8.2	8.4	7.7	10.9	8.5	6.7	2.2	0.1	-0.8
Major teaching	1.3	9.5	8.3	8.4	9.3	10.8	8.4	6.7	3.9	1.7	-2.2	-1.2
Other teaching	1.3	11.2	9.0	9.6	8.5	8.9	9.0	6.7	4.7	1.0	-0.9	-0.4
Non-teaching	1.9	10.9	9.9	8.9	9.5	8.9	8.7	7.2	4.8	0.9	-1.0	-1.7
DSH:												
Large urban	0.0	10.8	9.2	7.9	8.8	9.7	7.9	6.1	3.2	1.1	-1.7	-1.7
Other urban	3.2	10.7	9.3	10.0	9.0	9.9	9.6	7.8	6.5	0.4	-0.2	-1.1
Rural	0.3	10.0	10.5	8.9	9.4	8.6	11.0	9.7	7.0	2.8	-1.3	-1.1
Non-DSH	2.4	11.3	9.8	9.5	9.3	8.9	9.0	7.0	4.8	1.4	-1.2	-0.6
Teaching and DSH	0.7	10.7	8.7	8.6	8.3	9.8	8.9	6.8	4.5	1.0	-1.1	-1.1
Teaching only	2.6	11.3	9.3	10.3	9.5	8.9	8.9	6.6	4.8	2.1	-1.8	0.5
DSH only	1.8	10.5	10.0	8.8	10.0	9.2	8.5	7.3	4.9	0.8	-1.1	-2.3
No teaching or DSH	2.0	11.1	9.8	9.0	9.1	8.8	8.8	7.1	4.8	1.0	-0.9	-1.4
Voluntary	1.8	10.6	9.1	9.0	9.1	9.0	8.8	6.9	4.7	1.5	-1.1	-0.8
Proprietary	0.7	11.0	10.5	9.6	8.7	11.3	9.0	5.5	3.7	-1.3	-3.3	-2.5
Urban government	2.4	11.7	10.3	8.7	9.0	10.2	7.9	7.9	5.8	0.3	-1.0	-2.4
Rural government	1.5	11.7	10.3	8.2	7.9	6.8	10.8	9.9	5.7	2.9	1.4	-0.2

Note: Data for each PPS year are from hospital cost reporting periods beginning during that Federal fiscal year. Excludes hospitals in Maryland; includes hospitals in Massachusetts and New York beginning with 1986 and New Jersey beginning with 1989. Changes are based on cohorts of hospitals with cost reports in each of two consecutive years. DSH = disproportionate share.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

Table B-3. Annual Change in PPS Capital Costs Per Case, by Hospital Group, 1984-1995 (In Percent)

Hospital Group	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
All hospitals	10.3%	17.7%	11.6%	6.7%	6.9%	11.5%	3.3%	7.9%	3.2%	3.0%	1.8%	-0.7%
Urban	9.3	17.6	11.2	6.5	7.0	12.0	2.9	7.6	3.0	3.3	1.7	-1.0
Rural	14.0	16.6	12.5	6.9	6.1	8.0	4.8	9.0	3.9	1.4	2.2	1.3
Large urban	7.4	16.3	11.2	5.5	7.9	12.2	2.7	7.4	2.1	3.6	2.1	-1.0
Other urban	12.1	19.4	11.3	8.1	5.8	11.8	3.2	8.0	4.3	2.9	1.3	-0.7
Rural referral	14.7	14.7	7.3	9.1	8.6	10.3	1.7	9.5	4.3	2.1	1.8	8.2
Sole community	15.3	17.0	14.9	5.2	6.1	8.0	10.4	7.1	0.7	0.2	1.8	1.7
Other rural	13.3	17.1	13.1	6.7	5.2	7.2	4.9	8.9	4.8	1.5	2.5	-1.9
Major teaching	2.4	14.3	12.9	8.1	9.6	19.3	5.3	11.0	0.6	5.9	1.0	1.3
Other teaching	10.6	18.3	10.5	7.0	6.3	10.1	3.5	8.3	3.3	3.0	3.7	-0.3
Non-teaching	11.3	17.8	11.9	6.1	6.6	10.2	2.4	6.5	3.6	2.0	0.6	-1.8
DSH:												
Large urban	5.3	15.6	12.9	5.1	8.5	12.7	2.3	7.2	1.1	3.7	1.9	0.2
Other urban	12.5	19.7	11.7	9.8	5.8	11.8	2.7	8.4	4.8	3.4	2.1	-1.5
Rural	10.7	17.1	16.7	9.1	7.0	7.9	7.3	7.5	3.1	1.1	1.9	3.9
Non-DSH	12.3	18.0	10.3	6.0	6.4	10.9	3.9	8.1	3.7	2.6	1.5	-1.3
Teaching and DSH	6.7	17.0	12.4	7.3	7.8	12.9	3.4	9.2	2.0	3.7	2.9	0.4
Teaching only	13.2	18.4	8.4	7.3	5.9	12.7	5.7	9.2	3.8	4.8	2.6	0.2
DSH only	10.5	17.9	12.9	6.9	6.6	10.7	1.8	5.5	3.6	2.8	0.3	-1.5
No teaching or DSH	11.8	17.6	11.0	5.4	6.6	9.9	2.9	7.3	3.6	1.3	0.9	-2.1
Voluntary	10.1	17.1	10.7	7.2	7.7	11.7	3.8	7.9	3.4	3.5	2.5	-0.4
Proprietary	9.0	18.9	10.9	2.3	3.7	10.7	-0.1	5.6	0.1	0.1	-4.7	-3.0
Urban government	12.2	17.9	21.3	8.9	6.6	12.8	2.1	9.8	5.9	2.3	3.1	0.1
Rural government	13.6	20.5	12.4	8.1	3.1	7.2	7.8	9.3	4.1	4.5	2.3	-1.4

Note: Data for each PPS year are from hospital cost reporting periods beginning during that Federal fiscal year. Excludes hospitals in Maryland; includes hospitals in Massachusetts and New York beginning with 1986 and New Jersey beginning with 1989. Changes are based on cohorts of hospitals with cost reports in each of two consecutive years. DSH = disproportionate share.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

Table B-4. PPS Inpatient Margin, by Hospital Group, 1984-1995 (In Percent)

Hospital Group	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
All hospitals	13.4%	13.0%	8.7%	5.9%	2.7%	0.3%	-1.5%	-2.4%	-1.1%	1.0%	4.0%	9.0%
Urban	14.5	13.9	9.8	6.8	3.3	0.8	-1.2	-2.2	-1.0	1.3	5.7	9.7
Rural	7.7	7.4	2.2	0.2	-1.2	-2.9	-3.7	-3.7	-1.5	-0.7	0.2	4.4
Large urban	15.0	13.9	10.0	6.8	3.1	0.7	-0.7	-1.4	0.3	2.8	7.8	11.8
Other urban	13.8	14.0	9.4	6.8	3.7	0.9	-1.9	-3.4	-3.0	-1.1	2.6	6.3
Rural referral	9.9	12.9	7.9	6.1	3.9	1.2	0.0	-0.6	2.9	2.3	2.8	6.2
Sole community	8.0	6.4	2.1	0.3	-1.2	-2.6	-1.2	-0.8	2.5	3.9	4.3	6.5
Other rural	7.0	6.0	0.3	-1.9	-3.2	-4.5	-6.0	-6.0	-4.8	-3.8	-2.5	2.9
Major teaching	18.6	19.9	15.2	12.9	10.0	7.9	7.2	7.5	9.0	10.9	16.3	19.4
Other teaching	14.9	14.5	10.5	7.2	3.9	1.4	-1.0	-2.2	-1.2	0.8	4.6	8.3
Non-teaching	11.2	10.0	5.2	2.5	-0.7	-3.3	-5.2	-6.4	-5.0	-3.1	0.4	5.4
DSH:												
Large urban	15.3	14.2	10.8	8.3	5.5	3.5	3.0	2.8	4.9	7.8	13.0	17.0
Other urban	13.5	14.2	10.0	7.8	5.0	2.4	0.0	-1.3	-1.2	0.8	4.5	8.3
Rural	8.5	8.2	2.8	0.4	-0.5	-2.1	-2.2	-1.8	0.2	0.6	2.1	6.7
Non-DSH	12.6	11.9	7.0	3.6	-0.3	-2.9	-5.5	-6.7	-5.6	-4.0	-0.7	3.6
Teaching and DSH	15.8	15.9	12.4	10.0	7.6	5.3	4.1	3.6	4.8	7.3	11.8	15.2
Teaching only	16.1	16.3	11.3	7.0	2.2	-0.1	-3.2	-4.0	-2.9	-1.8	2.1	6.1
DSH only	11.6	10.7	6.1	3.6	0.6	-1.6	-3.0	-3.7	-2.3	-0.1	3.9	9.3
No teaching or DSH	10.8	9.5	4.5	1.5	-1.8	-4.6	-6.9	-8.4	-7.2	-5.4	-2.5	2.0
Voluntary	14.0	13.7	9.6	6.5	3.1	0.7	-1.3	-2.5	-1.2	0.6	4.3	8.2
Proprietary	12.9	11.0	6.3	3.4	0.0	-3.9	-5.7	-4.4	-2.2	1.8	8.5	14.4
Urban government	13.5	14.1	9.1	7.6	4.8	3.6	2.7	1.4	1.9	4.7	9.6	12.6
Rural government	6.6	5.1	-0.6	-2.3	-2.3	-3.7	-4.0	-4.4	-2.6	-2.0	-2.6	1.9

Note: The PPS inpatient margin reflects capital as well as operating payments and costs. Data for each PPS year are from hospital cost reporting periods beginning during that Federal fiscal year. Excludes hospitals in Maryland; includes hospitals in Massachusetts and New York beginning with 1986 and New Jersey beginning with 1989. DSH = disproportionate share.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

Table B-5. Distribution of PPS Inpatient Margins and Percentage of Hospitals With Negative Margin, 1984-1995

	Percentile					Percent With
Year	10th	25th	Median	75th	90th	Negative Margin
1984	-5.8%	3.1%	10.3%	16.2%	21.5%	18.2%
1985	-8.2	1.3	9.2	16.0	22.3	21.8
1986	-15.6	-4.2	4.5	11.8	18.1	35.6
1987	-18.5	-6.8	2.6	10.4	17.4	42.2
1988	-22.6	-9.7	0.6	9.4	17.5	48.3
1989	-24.7	-11.9	-1.7	7.9	16.3	54.7
1990	-26.1	-13.6	-3.3	6.6	15.8	59.0
1991	-27.3	-15.4	-4.4	5.9	15.0	61.2
1992	-26.6	-14.3	-2.8	7.6	16.9	57.2
1993	-23.6	-12.1	-0.7	9.6	19.4	51.8
1994	-22.3	-10.0	1.6	12.1	22.8	45.9
1995	-18.0	-5.6	5.7	16.3	26.5	36.4

Note: The PPS inpatient margin reflects capital as well as operating payments and costs. Data for each PPS year are from hospital cost reporting periods beginning during that Federal fiscal year. Excludes hospitals in Maryland; includes hospitals in Massachusetts and New York beginning with 1986 and New Jersey beginning with 1989.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

Table B-6. Total Hospital Margin, by Hospital Group, 1984-1995 (In Percent)

Hospital Group	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
All hospitals	7.3%	6.6%	4.3%	3.6%	3.5%	3.6%	3.6%	4.4%	4.4%	4.4%	5.0%	5.7%
Urban	7.7	6.9	4.5	3.7	3.6	3.5	3.5	4.3	4.2	4.3	4.9	5.5
Rural	5.0	4.7	3.0	2.9	3.3	4.2	4.7	5.1	5.3	5.1	5.5	6.7
Large urban	7.5	6.6	4.0	3.2	3.0	2.9	2.4	3.6	3.6	3.8	4.2	4.6
Other urban	8.1	7.2	5.4	4.6	4.5	4.7	5.2	5.6	5.3	5.2	6.1	7.0
Rural referral	7.4	8.4	5.7	5.7	5.1	6.5	6.5	6.5	6.7	6.8	7.1	9.2
Sole community	4.8	4.1	2.7	2.3	2.7	3.3	4.3	5.4	5.6	5.6	5.9	6.4
Other rural	4.4	3.7	2.2	2.1	3.0	3.7	4.2	4.5	4.6	4.3	4.7	5.8
Major teaching	5.2	5.7	2.2	2.1	2.4	1.8	0.9	3.5	3.2	3.3	3.1	3.8
Other teaching	8.4	7.3	5.6	4.4	4.3	4.5	4.4	4.7	4.4	4.7	5.3	5.9
Non-teaching	7.3	6.4	4.5	3.8	3.6	3.9	4.4	4.8	4.9	4.9	5.9	6.4
DSH:												
Large urban	6.6	5.7	3.2	2.4	2.2	2.0	1.3	3.1	3.1	3.5	3.7	3.9
Other urban	7.9	7.1	5.4	4.7	4.6	4.7	5.3	5.9	5.8	5.4	6.2	7.2
Rural	5.8	5.7	2.5	2.8	3.5	4.4	5.7	7.4	7.7	6.0	6.0	8.0
Non-DSH	7.7	7.0	4.9	4.2	4.2	4.4	4.5	4.6	4.4	4.6	5.4	6.0
Teaching and DSH	6.7	6.1	3.6	3.0	2.9	3.0	2.4	4.0	3.9	4.0	4.1	4.6
Teaching only	9.0	8.5	5.9	4.7	5.0	4.6	4.5	4.7	3.9	4.4	5.1	6.1
DSH only	7.7	6.5	4.6	3.7	3.5	3.4	4.2	5.1	5.2	5.1	6.3	6.8
No teaching or DSH	7.0	6.2	4.4	4.0	3.7	4.3	4.5	4.5	4.7	4.7	5.5	6.0
Voluntary	7.7	7.0	4.9	3.8	3.8	3.9	3.9	4.3	4.0	4.1	4.8	5.5
Proprietary	8.8	7.5	5.6	4.6	3.6	2.9	3.9	5.2	6.6	7.2	9.6	9.2
Urban government	4.4	4.4	0.9	2.3	2.2	2.5	1.7	4.4	4.3	4.5	3.4	4.0
Rural government	4.6	2.9	2.0	1.5	2.4	3.3	4.0	4.8	5.2	4.5	4.7	6.0

Note: Data for each PPS year are from hospital cost reporting periods beginning during that Federal fiscal year. Excludes hospitals in Maryland; includes hospitals in Massachusetts and New York beginning with 1986 and New Jersey beginning with 1989. DSH = disproportionate share.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

Table B-7. Distribution of Total Hospital Margins and Percentage of Hospitals With Negative Margin, 1984-1995

	Percentile					Percent With
Year	10th	25th	Median	75th	90th	Negative Margin
1984	-6.2%	0.6%	5.2%	9.4%	13.9%	22.6%
1985	-8.0	-0.4	4.3	8.8	13.3	26.4
1986	-11.3	-2.5	2.8	7.0	11.1	33.4
1987	-11.6	-2.9	2.4	6.6	10.7	35.1
1988	-10.7	-2.5	2.6	6.6	10.7	34.0
1989	-9.3	-1.7	2.8	6.8	10.9	31.9
1990	-8.2	-0.9	3.2	7.1	11.0	28.5
1991	-6.5	-0.4	3.4	7.2	11.5	26.4
1992	-6.4	-0.2	3.4	7.4	11.8	26.2
1993	-5.3	0.1	3.7	7.6	11.6	24.1
1994	-4.6	0.4	3.9	7.9	12.3	21.7
1995	-4.3	0.8	4.5	8.5	13.0	20.4

Note: Data for each PPS year are from hospital cost reporting periods beginning during that Federal fiscal year. Excludes hospitals in Maryland; includes hospitals in Massachusetts and New York beginning with 1986 and New Jersey beginning with 1989.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

Appendix C. Medicare Enrollment and Spending

The Medicare program provides health insurance coverage for the elderly and certain disabled populations. Medicare Hospital Insurance, or Part A, finances inpatient hospital care and skilled nursing facility, hospice, and most home health agency care. Supplementary Medical Insurance, or Part B, pays for ambulatory care provided in various ambulatory settings, and durable medical equipment.

Eligibility for Medicare Part A is based on age or disability status. People who are 65 and older and are eligible to receive cash benefits under Social Security (including Railroad Retirement beneficiaries) are automatically eligible for Part A benefits and pay no premiums. (The small number of elderly who are not automatically eligible can purchase Part A coverage.) In addition, anyone with a permanent total disability who has qualified for Social Security disability benefits for at least 24 months, as well as most people requiring chronic kidney dialysis or a kidney transplant to maintain life, can receive Part A coverage at no charge.

Medicare Part B is open to everyone eligible for Part A. In 1997, enrollees pay a Part B premium of $43.80 per month. Although Part B is a voluntary program, nearly all eligibles elect to participate. Those with end-stage renal disease have a particular incentive to purchase Part B coverage because it covers outpatient dialysis.

In 1996, 38.0 million people were enrolled in Medicare (see Table C-1). About 88 percent were eligible because of age. Total Medicare program payments in 1996 were estimated at $200.6 billion (see Table C-2). Part A payments increased by 9.3 percent from the previous year, while Part B payments grew 8.5 percent. Beneficiaries contributed an additional $29.7 billion in copayments and deductibles in 1996, bringing the total payments to providers for Medicare-covered services to $230 billion (see Table C-3).

Although still the costliest program component, the inpatient hospital setting's share of program payments continues to decline. The annual rate of growth fell from 20.1 percent between 1980 and 1981 to 8.7 percent between 1995 and 1996 (see Table C-4). Payments for other Part A services, on the other hand, account for a growing share of total expenditures. Medicare payments to skilled nursing facilities grew from $411.0 million in 1980 to $11.7 billion in 1996, increasing an average of 23.5 percent per year. Home health payments also have accelerated, climbing an average of 22 percent per year since 1980, from $778.0 million to $18.3 billion in 1996.

The share of Medicare payments devoted to ambulatory services also has increased, although much less dramatically than for post-acute services. Total payments for Part B services grew from 30 percent of program spending in 1980 to 35 percent in 1996. Part B payments for outpatient services reached $16.6 billion in 1996, an average annual increase of 14.6 percent since 1980 (see Table C-5).

Table C-1. Total Medicare Enrollment, Fiscal Years 1980-1996 (In Millions)

Year	Number of People		
	Total	Aged	Under 65
1980	28.5	25.5	3.0
1981	29.0	26.0	3.0
1982	29.5	26.5	3.0
1983	30.0	27.1	2.9
1984	30.5	27.6	2.9
1985	31.1	28.2	2.9
1986	31.7	28.8	3.0
1987	32.4	29.4	3.0
1988	33.0	29.9	3.1
1989	33.6	30.4	3.2
1990	34.2	30.9	3.3
1991	34.9	31.5	3.4
1992	35.6	32.0	3.6
1993	36.3	32.5	3.8
1994	36.9	32.8	4.1
1995	37.5	33.1	4.4
1996[a]	38.0	33.4	4.6

Note: Rows may not sum to the total due to rounding.

[a] Estimated.

SOURCE: Health Care Financing Administration, Office of the Actuary.

Table C-2. Estimated Medicare Program Payments, 1980-1996

Year	Total Program		Part A		Part B	
	Payments (In Billions)	Percent Change	Payments (In Billions)	Percent Change	Payments (In Billions)	Percent Change
1980	$ 36.3	—	$ 25.5	—	$ 10.9	—
1981	43.6	20.0%	30.7	20.7%	12.9	18.6%
1982	51.0	17.0	35.7	16.1	15.4	19.4
1983	58.0	13.7	39.9	11.8	18.2	18.0
1984	65.0	12.1	44.7	12.2	20.3	12.0
1985	70.1	7.8	47.4	6.0	22.8	11.8
1986	75.7	8.0	49.1	3.6	26.6	17.1
1987	80.5	6.3	49.7	1.2	30.8	15.5
1988	88.0	9.3	53.8	8.3	34.1	10.8
1989	99.4	13.0	61.5	14.2	37.9	11.1
1990	108.8	9.5	66.3	7.8	42.6	12.3
1991	122.1	12.2	75.8	14.3	46.3	8.9
1992	138.1	13.1	88.7	17.0	49.4	6.6
1993	150.3	8.9	97.0	9.4	53.3	8.0
1994	167.3	11.3	108.3	11.6	59.0	10.6
1995	183.9	9.9	119.4	10.3	64.5	9.4
1996	200.6	9.0	130.6	9.3	70.0	8.5

Note: Payments are incurred expenditures rather than outlays and do not include beneficiary copayments.

SOURCE: Health Care Financing Administration, Office of the Actuary.

Table C-3. Estimated Beneficiary Liabilities, 1985-1996

Year	Total Medicare			Inpatient Hospital		Other Medicare	
	Beneficiary Liability (In Billions)[a]	Program Payments (In Billions)	Beneficiary Share of Total Payments[b]	Beneficiary Liability (In Billions)	Beneficiary Share	Beneficiary Liability (In Billions)[c]	Beneficiary Share
1985	$13.5	$ 70.1	16.2%	$3.4	7.0%	$10.2	28.6%
1986	15.4	75.7	16.9	4.1	8.2	11.3	27.9
1987	16.8	80.5	17.2	4.5	8.8	12.2	26.8
1988	17.7	88.0	16.8	4.8	8.7	12.9	25.8
1989	17.2	99.4	14.8	3.6	6.0	13.7	23.7
1990	21.4	108.8	16.4	5.3	8.1	16.1	24.7
1991	22.6	122.1	15.6	5.9	8.2	16.6	23.1
1992	23.1	138.1	14.3	6.2	7.6	16.9	21.2
1993	24.1	150.3	13.8	6.4	7.5	17.7	19.9
1994	26.2	167.3	13.5	6.7	7.3	19.4	19.1
1995	27.8	183.9	13.1	6.9	7.1	20.9	18.4
1996	29.7	200.6	12.9	7.3	6.9	22.4	18.0

[a] Beneficiary liabilities include Part A and Part B coinsurance and deductibles plus the additional amount physicians may charge for unassigned claims. They exclude Part B premium payments.

[b] Total payments include program payments and beneficiary liabilities.

[c] Estimates of beneficiary liability for other Medicare services are understated because they assume that outpatient coinsurance is equal to 20 percent of payments.

SOURCE: Health Care Financing Administration, Office of the Actuary.

Table C-4. Estimated Medicare Part A Program Payments, by Type of Service, 1980-1996

Year	Inpatient Hospital		Skilled Nursing Facility		Home Health Agency[a]		Hospice	
	Payments (In Billions)	Percent Change	Payments (In Billions)	Percent Change	Payments (In Billions)	Percent Change	Payments (In Billions)	Percent Change
1980	$ 24.5	—	$ 0.4	—	$ 0.8	—	$ 0.0	—
1981	29.4	20.1%	0.5	9.5%	1.0	26.0%	0.0	—
1982	33.9	15.4	0.5	9.3	1.3	28.5	0.0	—
1983	37.8	11.3	0.5	6.7	1.6	26.6	0.0	—
1984	42.3	12.0	0.6	6.9	1.9	17.5	[b]	—
1985	44.9	6.1	0.6	2.9	1.9	4.0	[b]	—
1986	46.5	3.8	0.6	0.2	1.9	-0.5	0.1	79.1%
1987	47.1	1.2	0.6	8.8	1.9	-1.2	0.1	45.5
1988	50.7	7.7	0.9	47.1	2.1	8.6	0.2	39.3
1989	55.3	9.0	3.5	275.7	2.6	23.8	0.2	52.6
1990	59.6	7.8	2.5	-29.2	3.9	53.0	0.4	50.4
1991	66.8	12.0	2.9	18.4	5.6	43.1	0.6	56.7
1992	75.5	13.1	4.5	55.8	7.9	41.0	0.8	50.8
1993	79.2	5.0	6.5	42.8	10.4	30.6	1.1	25.2
1994	85.1	7.4	8.4	29.2	13.5	30.2	1.5	40.3
1995	90.9	6.8	10.4	24.2	16.4	21.8	1.9	26.7
1996	98.8	8.7	11.7	12.7	18.3	11.3	2.0	6.2

Note: Payments are incurred expenditures rather than outlays and do not include beneficiary copayments.

[a] Includes the relatively small amount of Part B home health agency expenditures.

[b] Payments were $8 million in 1984 and $43 million in 1985.

SOURCE: Health Care Financing Administration, Office of the Actuary.

Table C-5. Estimated Medicare Part B Program Payments, by Type of Service, 1980-1996

Year	Physician		Outpatient[a]		Other[b]	
	Payments (In Billions)	Percent Change	Payments (In Billions)	Percent Change	Payments (In Billions)	Percent Change
1980	$ 8.4	—	$ 1.9	—	$ 0.6	—
1981	10.1	19.4%	2.3	20.5%	0.6	-0.4%
1982	12.1	20.3	2.7	20.3	0.6	-0.4
1983	14.2	17.6	3.2	18.4	0.7	25.0
1984	15.7	10.3	3.7	15.6	0.9	30.4
1985	17.1	8.8	4.4	16.7	1.3	45.0
1986	19.6	14.6	5.2	20.2	1.8	39.6
1987	22.1	13.1	6.2	18.2	2.4	33.8
1988	24.0	8.4	7.0	13.4	3.1	26.8
1989	26.5	10.4	7.6	8.8	3.8	20.9
1990	29.5	11.4	8.5	11.7	4.5	19.9
1991	31.4	6.3	9.7	14.1	5.2	16.4
1992	32.4	3.2	11.0	13.2	6.0	14.6
1993	34.2	5.6	12.3	11.8	6.8	13.8
1994	37.2	8.9	13.9	12.9	7.8	14.4
1995	39.7	6.6	15.4	10.5	9.4	20.7
1996	41.7	5.2	16.6	7.9	11.6	23.5

Note: Payments are incurred expenditures rather than outlays and do not include beneficiary copayments.

[a] Includes payments for outpatient services provided by hospitals, free-standing dialysis facilities, skilled nursing facilities, comprehensive outpatient rehabilitation facilities, rural health clinics, and other providers of Medicare-covered outpatient services.

[b] Part B payments to home health agencies, group prepayment plans, and independent laboratories.

SOURCE: Health Care Financing Administration, Office of the Actuary.

Appendix D. Biographical Sketches of Commissioners

Joseph P. Newhouse, Chairman

Joseph P. Newhouse is the John D. MacArthur Professor of Health Policy and Management at Harvard University and director of Harvard's Division of Health Policy Research and Education. He has been at Harvard since 1988. Before that, Dr. Newhouse was deputy program manager for health sciences research and head of the Economics Department at the RAND Corporation. He has conducted research in health care financing, economics, and policy and was principal investigator for the RAND Health Insurance Study. Dr. Newhouse has served on many technical panels and commissions for both government and private health-related organizations, including the National Academy of Social Insurance, the Agency for Health Care Policy and Research, the Health Care Financing Administration, the Workers' Compensation Research Institute, and the Association of American Medical Colleges. He is a member of the governing council of the Institute of Medicine of the National Academy of Sciences and of the American Academy of Arts and Sciences, as well as a former member of the Physician Payment Review Commission and past president of the Association for Health Services Research. Dr. Newhouse is editor of the *Journal of Health Economics* and associate editor of the *Journal of Economic Perspectives*. He received a B.A. from Harvard College and a Ph.D. in Economics from Harvard University.

Susan S. Bailis

Susan S. Bailis is president and chief operating officer of The A•D•S Group, a wholly owned subsidiary of the Multicare Companies, and a senior vice president of Multicare. From 1983 to 1985, Ms. Bailis was associate director of New England Medical Center, where she managed the hospital's entry into the long-term care field. Earlier, she was director of social services at the medical center. Ms. Bailis has held a number of academic appointments, most recently as assistant professor of psychiatry at Tufts University School of Medicine. A member of the board of several hospitals, Ms. Bailis serves on the executive committee of the American Health Care Association; as president of the Massachusetts Federation of Nursing Homes; and on the boards of the Big Sister Association, Simmons College, and the Florence Heller School at Brandeis University. She is secretary of the National Association of Social Workers and president-elect of the Society for Hospital Social Work Directors of the American Hospital Association. She also served as a member of the Massachusetts Medicaid State Advisory Board. Ms. Bailis received a B.A. from Brandeis University and an M.S.W. from Simmons College School of Social Work.

Clay D. Edmands

Clay D. Edmands is president of Salina Regional Health Center in Salina, Kansas, an acute care rural referral center. His prior experience includes several years with the Fairview Community Hospital System in Minneapolis, where he held various positions, among them administrator for development and operations of regional health management and supportive services. Mr. Edmands was on the board of the Kansas Hospital Association from 1980 to 1992, serving as chairman, treasurer, and member of the executive committee. In addition to serving two terms on the regional policy advisory board of the American Hospital Association, Mr. Edmands was board president of the Health Systems Agency of Western Kansas. He is currently a preceptor for the University of Kansas program in health care administration and chair of the university's health care services advisory board. He holds a B.S. in business administration from the University of Kansas and an M.H.A. from the University of Minnesota.

Spencer Foreman

Spencer Foreman is president of Montefiore Medical Center, which is the university hospital for the Albert Einstein College of Medicine. A board-certified pulmonary specialist, Dr. Foreman holds professorships in medicine and epidemiology and social medicine at Einstein. Before assuming leadership of Montefiore in 1986, Dr. Foreman was president of Sinai Hospital of Baltimore. Prior to that, he was

director of the U.S. Public Health Service Hospital in Baltimore. Dr. Foreman is a fellow of the American College of Physicians and the New York Academy of Medicine and a member of the National Academy of Science's Institute of Medicine. He is a member of the board of directors of the American Joint Jewish Distribution Committee and Ursinus College. He was chairman of the Association of American Medical Colleges and a member of its Liaison Committee on Medical Education and the Accreditation Council on Graduate Medical Education. Dr. Foreman is a member and past chairman of the board of the League of Voluntary Hospitals in New York, a member and past chairman of the board of governors of the Greater New York Hospital Association, a member of the board of trustees of the American Hospital Association, and a past member of the board of directors of the Hospital Association of New York State. For 11 years, Dr. Foreman served as a commissioned officer in the U.S. Public Health Service. He received an M.D. from the University of Pennsylvania.

Spencer Johnson

Spencer Johnson has been president of the Michigan Health and Hospitals Association since 1985. Previously, he was executive vice president of the Hospital Association of New York State. Mr. Johnson's prior experience includes staff positions on the U.S. Senate Committee on Human Resources and in the U. S. House of Representatives. He was associate director of the Domestic Council for Health, Social Security, and Income Assistance from 1976 to 1977, where he was responsible for policy planning and development for President Gerald Ford. Mr. Johnson was also a member of the American Hospital Association's State Issues Forum and Council on Allied and Government Relations. He has served on various boards, including those of the Albany Medical College, the Washington Hospital Center, the Alpha Center and the Genesee Regional Health Planning Council. He is currently a board member of Blue Cross Blue Shield of Michigan. Mr. Johnson received a B.A. in journalism from St. Bonaventure University and an M.P.A. in health policy and planning from Cornell University.

Clark E. Kerr

Clark E. Kerr is president of ConsumerFirst, a nonprofit public benefit corporation and is chief executive officer of ConsumerFirst Television. He also chairs the California Health Policy and Data Advisory Commission and the California Health Information Committee. He is on the board of directors of the Integrated Healthcare Association and a member of the Health Benefits Advisory Council for the California Public Employees Retirement System. In addition, Mr. Kerr is executive producer and cohost of Health Upbeat, a television series on health care quality, access, and costs. Before joining ConsumerFirst, he held various positions at Bank of America, including vice president of government relations, manager of corporate health programs, and manager of benefits planning. Mr. Kerr is a past president of the California Business Group on Health and a member of the boards of directors of the Washington Business Group on Health, the Pacific Business Group on Health, and the National Committee for Quality Assurance. He received a B.A. from the University of California, Davis, and an M.B.A. from the University of California, Berkeley.

James R. Kimmey

James R. Kimmey is vice president for health sciences and professor of public health at the St. Louis University Health Sciences Center, as well as professor of community and family medicine at the St. Louis University School of Medicine. In addition, Dr. Kimmey serves as chair and chief executive officer of SLUCare, the clinical services division of the university. He has taught at the University of Wisconsin, the Johns Hopkins University, New York University, and Columbia University. He served as a commissioned officer in the Public Health Service (1962–68) and as president of the Institute for Health Planning (1978–87). He was administrator of the Division of Health Policy and Planning of the state of Wisconsin and executive director of the American Public Health Association in New York and Washington, D.C. Dr. Kimmey was president of the American Health Planning Association (1980–81) and a member of its board of directors. Former editor of *Health Planning Memorandum* and managing editor of the *American Journal of Public Health*, he has written extensively on health planning and other health policy topics. Dr. Kimmey received B.S., M.S., and M.D. degrees from the University of Wisconsin and an M.P.H. from the University of California, Berkeley.

Judith R. Lave

Judith R. Lave is professor of health economics and codirector of the Center for Research on Health Care at the University of Pittsburgh. Her primary academic appointment is in the Graduate School of Public Health, but she also holds secondary appointments in the Departments of Psychiatry, Economics, and the Katz Graduate School of Business. At the U.S. Department of Health and Human Services, she was director of the Division of Economic and Quantitative Analysis in the Office of the Deputy Assistant Secretary and director of the Office of Research in the Health Care Financing Administration. Dr. Lave is also a member of the National Academy of Science's Institute of Medicine and the National Academy of Social Insurance. She is past president of the Association for Health Services Research and the Foundation for Health Services Research. In addition, Dr. Lave chaired the technical panel on health and was a member of the expert panel on income and health care for the Advisory Council on Social Security. She serves on the editorial boards of the *Journal of Health Politics, Policy, and Law* and the *Health Administration Press*. She received a B.A. from Queens University in Canada, from which she also holds an honorary LL.D., and a Ph.D. in economics from Harvard University.

Hugh W. Long

Hugh W. Long is professor of health systems management at the Tulane University School of Public Health and Tropical Medicine. He also holds appointments at Tulane's Freeman School of Business, School of Law, and Graduate Faculty. Dr. Long is the faculty director of Tulane's master's of medical management degree program for physicians. He has taught at Yale University, Stanford University, San Jose State University, and Ohio State University. Chairman of the Medicare Geographic Classification Review Board, Dr. Long has served as a witness and ad hoc adviser on health care financing to the Committee on Ways and Means of the U.S. House of Representatives and to the Committee on Finance of the U.S. Senate. He has written numerous articles on health care financing and management and serves on the editorial board of *Decisions in Imaging Economics*. A member of the Louisiana bar, Dr. Long received a B.A. from Ohio State University, an M.B.A. and a Ph.D. in business administration and finance from Stanford University, and a J.D. from the Tulane University School of Law.

William A. MacBain

William A. MacBain is executive director of Geisinger Health Plan, Inc., and senior vice president, Health Plan Operations–New York, of Geisinger Health System. Before joining Geisinger, Mr. MacBain was chief operating officer at HMO of Western Pennsylvania. He was also director of operations for HMO of Oklahoma, vice president of finance with The Nassau Plan for Healthcare, and director of plan administration/planning at Pre-Paid Health Plan New York. Past chairman of the Managed Care Association of Pennsylvania, he is a board member of the American Association of Health Plans. He was assistant director of operations at Health Services Association and a public health investigator with the New York State Health Department. Mr. MacBain received B.A. and M.H.H.A degrees from Cornell University.

Robert J. Myers

Robert J. Myers was chief actuary of the Social Security Administration from 1947 to 1970 and deputy commissioner of Social Security from 1981 to 1982. Currently, he is a member of the Committee of Actuaries of the United Nations Joint Staff Pension Fund, as well as president of the International Fisheries Commissions Pension Society, and is a trustee for the investment program of the American Association of Retired Persons. Dr. Myers chaired the Commission on Railroad Retirement Reform (1988–90) and the Railroad Unemployment Compensation Committee (1983–85). He served on the Commission on the Social Security "Notch" Issue (1993–94) and was executive director of the National Commission on Social Security Reform (1982–83). In addition, Dr. Myers has served as president of both the American Academy of Actuaries and the Society of Actuaries, and is professor emeritus at Temple University. Dr. Myers received a B.S. degree from Lehigh University, an M.S. degree from the University of Iowa, and honorary degrees from Lehigh University and Muhlenberg College.

Glenda Rosenbloom

Glenda Rosenbloom is president of Rosenbloom and Associates. From 1983 to 1995, she was vice

president of prospective payment for American Medical International. Before that, she was health care consulting manager at Ernst & Whinney, where she was responsible for training hospital personnel who were implementing Medicare's prospective payment system. From 1972 to 1982, Ms. Rosenbloom was senior director for Medicare provider payment at the Blue Cross Blue Shield Association. Earlier, she was audit supervisor at Peat, Marwick, Mitchell. Ms. Rosenbloom cochaired the Medicare Technical Advisory Group. She also served on the board of the Federation of American Health Systems, chaired its legislative committee, and was vice chair of its health care financing committee. Ms. Rosenbloom received a B.S. from the University of Illinois and is a certified public accountant.

Gerald M. Shea

Gerald M. Shea is assistant to the president for government affairs of the American Federation of Labor-Congress of Industrial Organizations. Previously, he served as executive assistant to the union's president, executive assistant to its secretary-treasurer, director of its employee benefits department, and head of its health care reform campaign. Mr. Shea's prior experience includes 12 years with the national office of the Service Employees International Union, where he held various positions, including assistant to the president for government affairs and health care division director. Before that, he was executive director and business manager of two local unions. Mr. Shea is a member of the Joint Commission on the Accreditation of Health Care Organizations and the Advisory Board of the Social Security Administration. He received a B.A. from Boston College.

Roxane B. Spitzer

Roxane B. Spitzer is professor and associate dean for practice management at Vanderbilt University School of Nursing, professor of management at the Owen School of Vanderbilt, and executive director of University Community Health Systems. Previously, she was vice president of managed care at MEDICUS Systems. She was also corporate vice president of St. Joseph Health System in Orange, California, and chief operating officer of the Good Samaritan Hospital in Los Angeles. Dr. Spitzer holds professorships at Texas Tech University Health Sciences Center; University of Southern California; University of California, Los Angeles; and Vanderbilt University. From 1981 to 1988, She was vice president, patient care services, at Cedars-Sinai Medical Center. Previously, she was director of nursing and practiced nursing in both inpatient and public health settings. She is a fellow of the American Academy of Nursing, a diplomate of the American College of Healthcare Executives, and serves on many other boards. She received a B.S. from Adelphi University, an M.A. in nursing service administration from Columbia University, and both an M.A. in management and an M.B.A. from Claremont Graduate School. Dr. Spitzer holds a Ph.D. in management from the Peter Drucker Management Center, Claremont Graduate School.

James R. Tallon, Jr.

James R. Tallon, Jr. is president of the United Hospital Fund of New York. He also chairs the Kaiser Commission on the Future of Medicaid and is a visiting lecturer at the Harvard University School of Public Health. In addition, he is a member of the board of commissioners of the Joint Commission on the Accreditation of Healthcare Organizations. He serves on the boards of the Alliance for Health Reform, the Alpha Center, the Association for Health Services Research, the Commonwealth Fund, and the New York Academy of Medicine. Before joining the United Hospital Fund, he was the majority leader of the New York State Assembly, where he served for 19 years beginning in 1975. Mr. Tallon was a member of the executive committee of the National Academy for State Health Policy and served as liaison to the President's Task Force on Health Care Reform from the National Conference of State Legislatures. Before his election to the Assembly, Mr. Tallon was the executive director of the NY-PENN Health Planning Council. He received a B.A. from Syracuse University and an M.A. from Boston University and holds honorary degrees from the College of Medicine and School of Graduate Studies of the State University of New York Health Science Center in Brooklyn, and the New York Medical College.

Jae L. Wittlich

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Appendix E. Glossary

The following acronyms and terms are frequently referenced in Prospective Payment Assessment Commission (ProPAC) reports. Many definitions are from various Health Care Financing Administration publications and from other sources, including the American Hospital Association, the Physician Payment Review Commission, and the *Federal Register*. Where necessary, ProPAC has developed or modified definitions consistent with its use of the terms in Commission documents.

ACRONYMS

AAHP	American Association of Health Plans
AAPCC	Adjusted Average Per Capita Cost
AMC	Academic Medical Center
ACR	Adjusted Community Rate
ADHC	Adult Day Health Center
AFDC	Aid to Families with Dependent Children
AHA	American Hospital Association
AHCPR	Agency for Health Care Policy and Research
ASC	Ambulatory Surgical Center
CAHPS	Consumer Assessments of Health Plans Study
CBO	Congressional Budget Office
CC	Complication and/or Comorbidity
CMI	Case-Mix Index
CORF	Comprehensive Outpatient Rehabilitation Facility
COTH	Council of Teaching Hospitals
CPI	Consumer Price Index
DRG	Diagnosis-Related Group
DSH	Disproportionate Share
EBRI	Employee Benefit Research Institute
ECI	Employment Cost Index
ESRD	End-Stage Renal Disease
FAcct	Foundation for Accountability
FDA	Food and Drug Administration
FTE	Full-Time Equivalent
GAO	General Accounting Office
GDP	Gross Domestic Product
GME	Graduate Medical Education
HCFA	Health Care Financing Administration
HCPP	Health Care Prepayment Plan
HEDIS	Health Plan Employer Data and Information Set
HHA	Home Health Agency
HHS	Health and Human Services, Department of
HI	Hospital Insurance
HIAA	Health Insurance Association of America
HMO	Health Maintenance Organization
IME	Indirect Medical Education
IPA	Independent Practice Association
JCAHO	Joint Commission on Accreditation of Healthcare Organizations
LOS	Length of Stay
MCCA	Medicare Catastrophic Coverage Act of 1988
MedPAR	Medicare Provider Analysis and Review file
MGCRB	Medicare Geographic Classification Review Board
MSA	Metropolitan Statistical Area
NCHS	National Center for Health Statistics
NCQA	National Committee for Quality Assurance
OMB	Office of Management and Budget, Executive Office of the President
OBRA	Omnibus Budget Reconciliation Act
PACE	Program of All inclusive Care for the Elderly
PCCM	Primary Care Case Management
PHO	Physician-Hospital Organization
PHP	Prepaid Health Plan
POS	Point of Service
PPO	Preferred Provider Organization
PPRC	Physician Payment Review Commission
PPS	Prospective Payment System
PRO	Peer Review Organization
ProPAC	Prospective Payment Assessment Commission
RBRVS	Resource-Based Relative Value Scale
SCH	Sole Community Hospital
SMI	Supplementary Medical Insurance
SNF	Skilled Nursing Facility
SSDI	Social Security Disability Insurance
SSI	Supplemental Security Income
TEFRA	Tax Equity and Fiscal Responsibility Act of 1982
UR	Utilization Review
VNA	Visiting Nurse Association

TERMS

Academic Medical Center—Hospitals owned by a medical school or those where most clinical service chiefs also serve as medical school department chairpersons.

Adjusted Admissions—A measure of all patient care activity in a hospital, including both inpatient and outpatient care. Adjusted admissions are the sum of inpatient admissions and an estimate of the volume of outpatient services, expressed as the number of inpatient admissions that could have been produced with the same amount of resources. This estimate is calculated by multiplying outpatient visits by the ratio of outpatient charges per visit to inpatient charges per admission. (AHA and ProPAC)

Adjusted Average Per Capita Cost (AAPCC)—Actuarial projections of per capita Medicare spending in an area for enrollees in fee-for-service Medicare. Separate AAPCCs are calculated—usually at the county level—for Part A and Part B services for the aged, disabled, and people with ESRD. Medicare pays risk plans by applying adjustment factors to 95 percent of the Part A and Part B AAPCCs. The adjustment factors reflect differences in Medicare per capita fee-for-service spending related to age and sex, as well as institutional, Medicaid, and employment status. (See also Risk Contract.) (ProPAC)

Adverse Selection—The result of enrolling in a health plan a disproportionate share of relatively unhealthy individuals compared with the population from which the share is drawn. (See also Favorable Selection, Risk Adjustment, and Risk Selection.) (ProPAC)

Aggregate Margin—A margin that compares revenues to expenses for a group of hospitals, rather than a single hospital. It is computed by subtracting the sum of expenses for all hospitals in the group from the sum of revenues and dividing by the sum of revenues. (See also PPS Inpatient Margin, PPS Operating Margin, and Total Margin.) (ProPAC)

Ambulatory Surgical Center (ASC)—A freestanding facility certified by Medicare that performs certain types of procedures on an outpatient basis. (ProPAC)

Balance Billing—Physician charges in excess of Medicare-allowed amounts, for which Medicare patients are responsible, subject to a limit. (ProPAC)

Basic DRG Payment Rate—The payment rate a hospital will receive for a Medicare patient in a particular diagnosis-related group. The payment rate is calculated by adjusting the standardized amount to reflect wage rates in the hospital's geographic area (and cost of living differences unrelated to wages) and the costliness of the DRG. (See also Standardized Amount and Diagnosis-Related Groups.) (ProPAC)

Beneficiary—A person enrolled in the Medicare program. (See also Enrollee.) (ProPAC)

Beneficiary Liability—The amount beneficiaries must pay providers for Medicare-covered services. Liabilities include copayments and coinsurance amounts, deductibles, and balance billing amounts. Beneficiaries also are responsible for paying the Medicare program for their share of the Part B premium, but this generally is not included in estimates of beneficiary liability. (ProPAC)

Bundling—The use of a single payment for a group of related services. (PPRC)

Capital Costs—Depreciation, interest, leases and rentals, taxes, and insurance on tangible assets like physical plant and equipment. (HCFA)

Capitation—A method of paying health care providers or insurers in which a fixed amount is paid per enrollee to cover a defined set of services over a specified period, regardless of actual services provided. (See also Bundling, Fee-for-Service, Per Diem, and Rate Setting.) (ProPAC)

Carrier—An organization, typically an insurance company, that has a contract with the Health Care Financing Administration to administer claims processing and make Medicare payments to health care providers for most Medicare Part B benefits. (See also Fiscal Intermediary and Part B.) (HCFA)

Case Mix—The mix of patients treated within a particular institutional setting, such as the hospital. Patient classification systems like DRGs can be used to measure hospital case mix. (See also DRGs and Case-Mix Index) (ProPAC)

Case-Mix Index (CMI)—The average DRG weight for all cases paid under PPS. The CMI is a measure of the relative costliness of the patients treated in each hospital or group of hospitals. (See also DRG.) (ProPAC)

Charges—The posted prices of provider services. Medicare requires hospitals to apply the same schedule of charges to all patients, regardless of the expected sources or amount of payment. (ProPAC)

Coinsurance—A proportion of total payment for covered services paid by a health insurance enrollee after payment of a deductible. (See also Copayment and Deductible.) (ProPAC)

Copayment—A fixed dollar amount paid for a covered service by a health insurance enrollee. (See also Coinsurance and Deductible.) (ProPAC)

Cost Contract—An arrangement between a health plan and HCFA under Section 1876 or Section 1833 of the Social Security Act, under which the health plan provides health services and is reimbursed its costs. The beneficiary can use providers outside the plan's provider network. (See also Health Care Prepayment Plan and Risk Contract.) (ProPAC)

Cost Sharing—A general term referring to payments made by health insurance enrollees for covered services. Examples of cost sharing include deductibles, coinsurance, and copayments. (See also Deductible, Coinsurance, and Copayment.) (ProPAC)

Cost Shifting—Increasing revenues from some payers to offset uncompensated care losses and lower net payments from other payers. (ProPAC)

Deductible—A fixed dollar amount for covered services paid by a health insurance enrollee before additional services become payable by an insurer. (See also Coninsurance and Copayment.) (ProPAC)

Diagnosis-Related Groups (DRGs)—A system for determining case mix, used for payment under Medicare's PPS and by some other payers. The DRG system classifies patients into groups based on the principal diagnosis, type of surgical procedure, presence or absence of significant comorbidities or complications, and other relevant criteria. DRGs are intended to categorize patients into groups that are clinically meaningful and homogeneous with respect to resource use. Medicare's PPS currently uses 490 mutually exclusive DRGs, each of which is assigned a relative weight that compares its costliness to the average for all DRGs. (See also Case Mix.) (ProPAC)

Disproportionate Share (DSH) Adjustment—A payment adjustment under Medicare's PPS or under Medicaid for hospitals that serve a relatively large volume of low-income patients. (CBO)

Dual Eligible—A Medicare beneficiary who qualifies for some assistance from Medicaid. A dual eligible may qualify either for full Medicaid benefits, or only for Medicaid coverage of Medicare cost sharing amounts. (ProPAC)

Enrollee—A person who is covered by health insurance. (See also Beneficiary.) (ProPAC)

Excluded Hospitals and Distinct-Part Units—Specialty hospitals (rehabilitation, psychiatric, long-term care, children's, and cancer) and distinct-part units in general hospitals (rehabilitation and psychiatric) that are excluded from Medicare's PPS. Hospitals located in U.S. territories, Federal hospitals, and Christian Science Sanatoria are also excluded from PPS. Excluded facilities remain under cost-based reimbursement, subject to rate of increase limits, established in accordance with TEFRA. (See also Tax Equity and Fiscal Responsibility Act of 1982.) (ProPAC)

Favorable Selection—The result of enrolling in a health plan a disproportionate share of healthy individuals compared with the population from which the share is drawn. (See also Adverse Selection, Risk Adjustment, and Risk Selection.) (ProPAC)

Fee-for-Service—A method of reimbursing health care providers in which payment is made for each unit of service rendered. (See also Bundling, Capitation, Per Diem, and Rate Setting.) (ProPAC)

Fiscal Intermediary—An entity, usually an insurance company, that has a contract with HCFA to determine and make Medicare payments for Part A and certain Part B benefits to hospitals and other providers of services and to perform related functions. (See also Part A and Part B.) (HCFA)

Fiscal Year—A 12-month period for which an organization plans the use of its funds, such as the Federal government's fiscal year (October 1 to September 30). Fiscal years are referred to by the calendar year in which they end; for example, the Federal fiscal year 1996 began October 1, 1995, and ended September 30, 1996. Individual providers can designate their own fiscal years, and this is reflected in differences in the time periods covered by the Medicare Cost Reports. (See also PPS Year.) (ProPAC)

Graduate Medical Education (GME)—The period following the completion of medical school when physicians, as residents, receive training in a specialty like family practice, general surgery, or anesthesiology. Medicare recognizes its share of the direct costs for these training programs in hospitals (including residents' salaries and benefits, faculty supervisory costs, program administration, and facility overhead costs) through a prospectively set, hospital-specific, per resident payment. (ProPAC)

Gross Domestic Product (GDP)—A valuation of all goods and services produced within the boundaries of the United States during a given period. (ProPAC)

Health Care Prepayment Plan (HCPP)—A Medicare managed care plan that receives payment for its reasonable costs of providing Part B services to Medicare enrollees. (See also Cost Contract and Risk Contract.) (HCFA)

Health Maintenance Organization (HMO)—A managed care plan that integrates financing and delivery of a comprehensive set of health care services to an enrolled population. HMOs may contract with, directly employ, or own participating health care providers. Enrollees are usually required to choose from among these providers and in return have limited copayments. Providers may be paid through capitation, salary, per diem, or prenegotiated fee-for-service rates. (See also Capitation, Fee-for-Service, Managed Care, Per Diem, Point-of-Service Option, and Preferred Provider Organization.) (ProPAC)

Health Plan Employer Data and Information Set (HEDIS)—A set of standardized measures of health plan performance. HEDIS allows comparisons between plans on quality, access and patient satisfaction; membership and utilization; financial information; and health plan management. HEDIS was developed by employers, HMOs, and the National Committee for Quality Assurance. (NCQA)

Indirect Medical Education (IME) Adjustment—A payment adjustment applied to DRG and outlier payments under PPS for hospitals that operate an approved graduate medical education program. For operating costs, the adjustment is based on the hospital's ratio of interns and residents to the number of beds. For capital costs, it is based on the hospital's ratio of interns and residents to average daily occupancy. (HCFA)

Input—The labor, capital, and other resources hospitals use to produce goods and services. (ProPAC)

Intensity of Services—The number and complexity of resources used in producing a patient care service, such as a hospital admission or home health visit. Intensity of services reflects, for example, the amount of nursing care, diagnostic procedures, and supplies furnished. (ProPAC)

International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM)—A diagnosis and procedure classification system designed to facilitate the collection of uniform and comparable health information. ICD-9-CM was issued in 1979 and is updated periodically. This system is used to group patients into DRGs. (HCFA)

Large Urban Area—A metropolitan statistical area with a population of one million or more, or a New England County Metropolitan Area with a population of 970,000 or more. (See also Metropolitan Statistical Area and Other Urban Area.) (ProPAC)

Major Teaching Hospitals—Hospitals with an approved graduate medical education program and a ratio of interns and residents to beds of 0.25 or greater. (See also Indirect Medical Education Adjustment and Other Teaching Hospitals.) (HCFA)

Managed Care—Any system of health service payment or delivery arrangements in which the health plan or provider attempts to control or coordinate health service use to contain health expenditures, improve quality, or both. Arrangements often involve a defined delivery system of providers having some form of contractual relationship with the plan. (See also Health Maintenance Organization, Point-of-Service Option, and Preferred Provider Organization.) (PPRC)

Market Basket Index—An index of the annual change in the prices of goods and services providers use for producing health services, also referred to as an input price index. There are separate market baskets for PPS hospital operating inputs and capital inputs; PPS-excluded facility operating inputs; and SNF, home health agency, and renal dialysis facility operating and capital inputs. (ProPAC)

Medicare Cost Report (MCR)—An annual report required of institutions participating in the Medicare program. The MCR records each institution's total costs and charges associated with providing services to all patients, the portion of those costs and charges allocated to Medicare patients, and the Medicare payments received. (See also PPS year.) (ProPAC)

Medicare Fee Schedule—The resource-based fee schedule Medicare uses to pay for physicians' and independent therapists' services. (See also Relative Value Scale and Resourced-Based Relative Value Scale.) (PPRC)

Medicare Provider Analysis and Review (MedPAR) File—A HCFA data file that contains charge data and clinical characteristics, such as diagnoses and procedures, for every hospital inpatient bill submitted to Medicare for payment. (ProPAC)

Medigap Policy—A privately purchased insurance policy that supplements Medicare coverage and meets specified requirements set by Federal statute and the National Association of Insurance Commissioners. (ProPAC)

Metropolitan Statistical Area (MSA)—A geographic area that includes at least one city with 50,000 or more inhabitants, or a Census Bureau-defined urban area of at least 50,000 inhabitants and a total MSA population of at least 100,000 (75,000 in New England). (OMB)

Nursing Facility—An institution that provides skilled nursing care and rehabilitation services to injured, functionally disabled, or sick persons. Formerly, distinctions were made between intermediate care facilities and SNFs. The Omnibus Budget Reconciliation Act of 1987 eliminated this distinction effective October 1, 1990, by requiring all nursing facilities to meet SNF certification requirements. (See also Skilled Nursing Facility.) (ProPAC)

Other Teaching Hospitals—Hospitals with an approved graduate medical education program and a ratio of interns and residents to beds of less than 0.25. (See also Indirect Medical Education Adjustment and Major Teaching Hospitals.) (ProPAC)

Other Urban Area—A metropolitan statistical area with a population of less than one million, or a New England County Metropolitan Area with fewer than 970,000 people. (See also Large Urban Area and Metropolitan Statistical Area.) (ProPAC)

Outliers—Cases with extremely long lengths of stay (day outliers) or extraordinarily high costs (cost outliers) compared with others classified in the same diagnosis-related group. Hospitals receive additional PPS payments for these cases. (ProPAC)

Part A—Medicare Hospital Insurance (HI) under Part A of Title XVIII of the Social Security Act, which covers beneficiaries for inpatient hospital, home health, hospice, and limited skilled nursing facility services. Beneficiaries are responsible for deductibles and copayments. Part A services are financed by payroll taxes through the Medicare HI trust fund. (See also Fiscal Intermediary and Part B.) (ProPAC)

Part B—Medicare Supplementary Medical Insurance (SMI) under Part B of Title XVIII of the Social Security Act, which covers Medicare beneficiaries for physician services, medical supplies, and other outpatient treatment and some home health care services. Beneficiaries are responsible for monthly premiums, copayments, deductibles, and balance billing. Part B services are financed by a combination of enrollee premiums and general tax revenues. (See also Carrier and Part A.) (ProPAC)

Peer Review Organization (PRO)—An organization that contracts with HCFA to investigate the quality of health care furnished to Medicare beneficiaries and to educate beneficiaries and providers. PROs also conduct targeted review of medical records and claims to evaluate the appropriateness of care provided. (ProPAC)

Per Diem Payments—Fixed daily payments that do not vary with the level of services used by the patient. (See also Capitation.) (ProPAC)

Physician-Hospital Organization (PHO)—An organization, usually in the form of a joint venture, commonly owned by a hospital and a group of physicians, often the hospital's medical staff. The PHO can act as an agent for both parties in various activities, including contracting with managed care plans, owning a managed care plan, and providing administrative services. (ProPAC)

Point-of-Service Option (POS)—A managed care option, usually offered by an HMO, that allows enrollees to choose among network and non-network providers at the time of service. Enrollees choosing non-network providers are subject to substantially higher coinsurance, copayments, or

deductibles. (See also Coinsurance, Copayments, Deductibles, Health Maintenance Organization, Managed Care, and Preferred Provider Organization.) (ProPAC)

PPS Inpatient Margin—A measure that compares PPS operating and capital payments with Medicare-allowable inpatient operating and capital costs. It is calculated by subtracting total Medicare-allowable inpatient operating and capital costs from total PPS operating and capital payments and dividing by total PPS operating and capital payments. (See also PPS Operating Margin.) (ProPAC)

PPS Operating Margin—A measure that compares PPS inpatient operating payments with Medicare-allowable inpatient operating costs. This measure excludes Medicare costs and payments for capital, direct medical education, organ acquisition, and other categories not included among Medicare-allowable inpatient operating costs. It is calculated by subtracting total Medicare-allowable inpatient operating costs from total PPS inpatient operating payments and dividing by total PPS inpatient operating payments. (See also PPS Inpatient Margin.) (ProPAC)

PPS Year—A designation referring to hospital cost reporting periods that begin during a given Federal fiscal year, reflecting the number of years since the initial implementation of PPS. For example, PPS 1 refers to hospital fiscal years beginning in Federal fiscal year 1984, which was the first year of PPS. For a hospital with a fiscal year beginning July 1, PPS 1 covers the period from July 1, 1984, through June 30, 1985. (See also Fiscal Year.) (ProPAC)

Preferred Provider Organization (PPO)—A network of providers through which services are available to enrollees at lower cost than through non-network providers. PPO enrollees may self-refer to any network or non-network provider at any time. (See also Fee for Service, Health Maintenance Organization, Managed Care, and Point-of-Service Option.) (ProPAC)

Prepaid Health Plan (PHP)—A Medicaid managed care program in which an entity contracts to provide certain medical services to enrollees in exchange for a capitation payment. Prepaid health plans are not required to cover the full range of Medicaid benefits. (See also Primary Care Case Management.) (HCFA)

Primary Care Case Management (PCCM)—A Medicaid managed care program in which an eligible individual may use services only with authorization from his or her assigned primary care provider. That provider is responsible for locating, coordinating, and monitoring all primary and other medical services for enrollees. (See also Prepaid Health Plan.) (HCFA)

Productivity—The ratio of outputs (goods and services produced) to inputs (resources used in production). Increased productivity implies that the hospital or health care organization is either producing more output with the same resources or the same output with fewer resources. (ProPAC)

Prospective Payment—A method of paying health care providers in which rates are established in advance. Providers are paid these rates regardless of the costs they actually incur. (See also Prospective Payment System.) (ProPAC)

Prospective Payment System (PPS)—Medicare's acute care hospital payment method for inpatient care. Prospective per case payment rates are set at a level intended to cover operating costs for treating a typical inpatient in a given diagnosis-related group. Payments for each hospital are adjusted for differences in area wages, teaching activity, care to the poor, and other factors. Hospitals may also receive additional payments to cover extra costs associated with atypical patients (outliers) in each DRG. Capital costs, originally excluded from PPS, are being phased into the system. By 2001, capital payments will be made on a fully prospective, per case basis. (See also Capital Costs, Diagnosis-Related Groups, Outliers, and Prospective Payment.) (ProPAC)

Relative Value Scale—An index that assigns weights to each medical service; the weights represent the relative amount to be paid for each service. The relative value scale used in the development of the Medicare Fee Schedule consists of three components: physician work, practice expense, and malpractice expense. (PPRC)

Resource-Based Relative Value Scale (RBRVS)—A relative value scale based on the

resources involved in providing a physician service. (See also Relative Value Scale.) (PPRC)

Risk Adjustment—Increases or reductions in the amount of payment made to a health plan on behalf of a group of enrollees to compensate for health care expenditures that are expected to be higher or lower than average. (See also Risk Selection.) (PPRC and ProPAC)

Risk Contract—An arrangement between a health maintenance organization and HCFA under Section 1876 of the Social Security Act. Capitation payments to plans are set at 95 percent of the AAPCC. (See also Adjusted Average Per Capita Cost, Capitation, Cost Contract, and Health Care Prepayment Plan.) (ProPAC)

Risk Selection—A situation where the health status and expected costs of health plan enrollees differ across health plans. (See also Adverse Selection, Favorable Selection, and Risk Adjustment.) (PPRC and ProPAC)

Rural Referral Center—Generally, large rural hospitals that Medicare designates as serving patients referred by other hospitals or by physicians who are not members of the hospital's medical staff. Under Medicare, rural referral centers may be subject to less restrictive criteria in geographic reclassification requests.

Skilled Nursing Facility (SNF)—An institution that has a transfer agreement with one or more hospitals, provides primarily inpatient skilled nursing care and rehabilitative services, and meets other specific certification requirements. (See also Nursing Facility.) (IOM)

Sole Community Hospital—A hospital Medicare designates as the only provider of hospital care in its market area. Under PPS, sole community hospitals benefit from payment provisions intended to ensure their financial viability and access to hospital services for Medicare beneficiaries. (ProPAC)

Standardized Amount—An amount used as the basis for payment under PPS. It is intended to represent the national average operating cost of inpatient treatment for a typical Medicare patient in a reasonably efficient hospital in a large urban or other area. Standardized amounts are based on Medicare costs reported by hospitals for cost reporting periods ending in 1982, adjusted for geographic location and certain hospital characteristics, such as teaching activity. The adjusted amounts are updated to the year of payment by an annual update factor. (See also Update Factor.) (CRS)

Supplemental Insurance—Any private health insurance plan held by a Medicare beneficiary, including medigap policies and post-retirement health benefits. (ProPAC)

Swing-Bed Hospital—A hospital participating in the Medicare swing-bed program. This program allows rural hospitals with fewer than 100 beds to provide post-acute care services in acute care beds. (HCFA)

Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA)—Legislation that established limits on reimbursements for hospital inpatient operating costs per Medicare discharge. A facility's limit is derived from its costs in a base year updated to the current year by an annual update factor. Medicare payments for operating costs generally may not exceed the facility's limit. These provisions apply generally to hospitals and units excluded from PPS. (See also Excluded Hospitals and Distinct-Part Units.) (ProPAC)

Total Margin—A measure that compares total hospital revenues with expenses for inpatient, outpatient, and non-patient care activities. The total margin is calculated by subtracting total expenses from total revenues and dividing by total revenues. (ProPAC)

Uncompensated Care—Care rendered by hospitals or other providers without payment from the patient or a government-sponsored or private insurance program. It includes both charity care, which is provided without the expectation of payment, and bad debts, for which the provider has made an unsuccessful effort to collect payment due from the patient. (ProPAC)

Update Factor—The year-to-year increase in base payment amounts for PPS and excluded hospitals and dialysis facilities. The update factors generally are legislated by the Congress after considering annual recommendations provided by ProPAC and

the Secretary of HHS. ProPAC's update factors are intended to reflect changes in the prices of inputs used to provide patient care services as well as changes in productivity, technological advances, quality of care, and long-term cost-effectiveness of services. ProPAC recommends separate update factors for PPS hospital operating payments, PPS hospital capital payments, the TEFRA target amounts for PPS-excluded hospitals and distinct-part units, and composite rate payments to dialysis facilities. (See also Market Basket Index.) (ProPAC)

Utilization Review (UR)—The review of services delivered by a health care provider to evaluate the appropriateness, necessity, and quality of the prescribed services. The review can be performed on a prospective, concurrent, or retrospective basis. (ProPAC)

Volume Performance Standard System—The mechanism to adjust fee updates for the Medicare Fee Schedule based on how annual increases in actual expenditures compare with previously determined performance standard rates of increase. (See also Medicare Fee Schedule.) (PPRC)

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